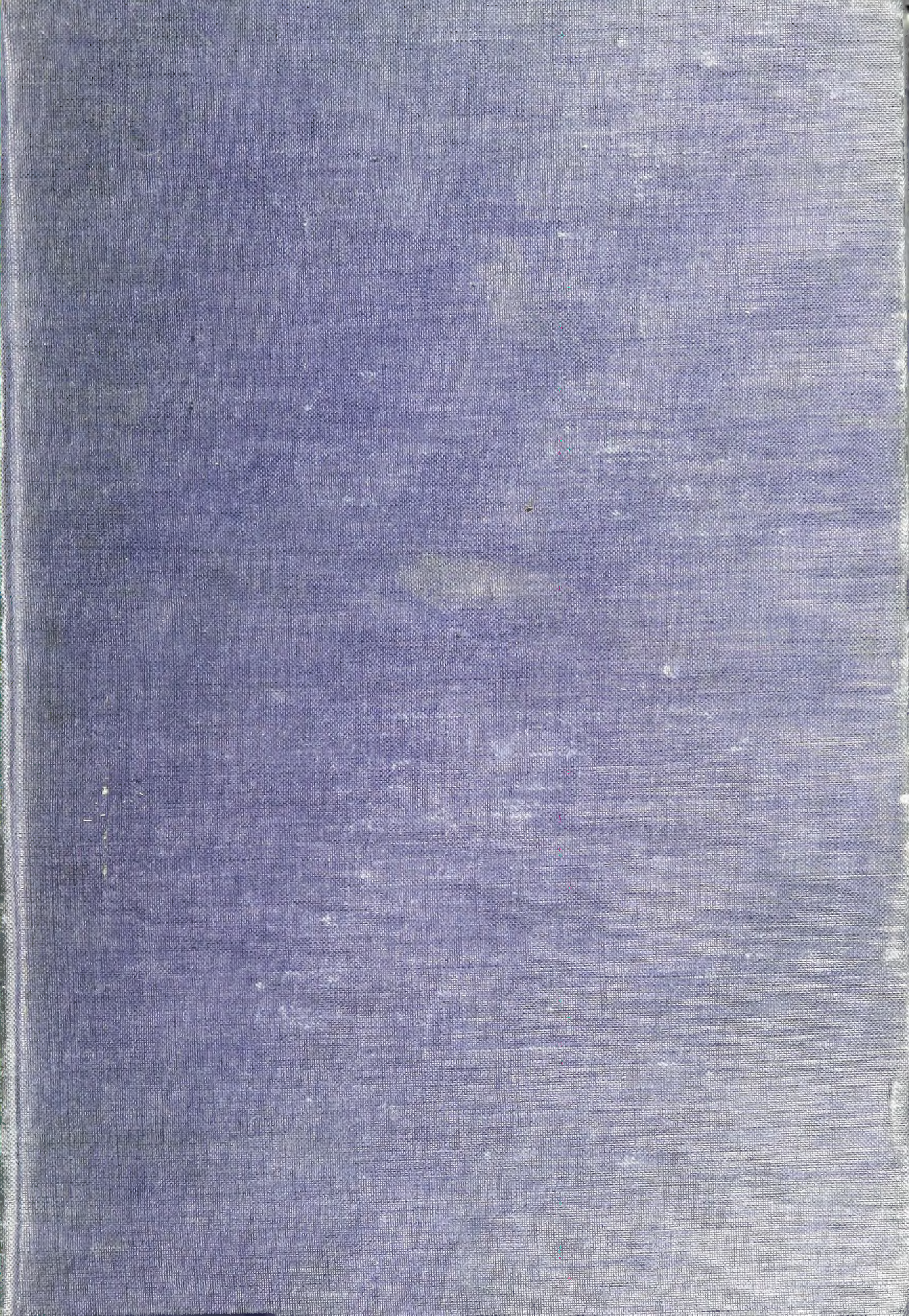



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THE CRITICAL PHILOSOPHY OF IMMANUEL KANT

PUBLISHED BY

JAMES MACLEHOSE AND SONS, GLASGOW,

Publishers to the University.

MACMILLAN AND CO., LTD., LONDON.

New York, -	*The Macmillan Co.*
Toronto, -	*The Macmillan Co. of Canada.*
London,	*Simpkin, Hamilton and Co.*
Cambridge,	*Bowes and Bowes.*
Edinburgh, -	*Douglas and Foulis.*
Sydney,	*Angus and Robertson.*

MCMIX.

THE CRITICAL PHILOSOPHY OF IMMANUEL KANT

BY

EDWARD CAIRD, D.C.L., LL.D.

LATE MASTER OF BALLIOL COLLEGE, OXFORD

IN TWO VOLUMES

VOL. I

SECOND EDITION

GLASGOW

JAMES MACLEHOSE AND SONS

Publishers to the University

1909

First Edition, 1889.
Reprinted 1909.

GLASGOW: PRINTED AT THE UNIVERSITY PRESS
BY ROBERT MACLEHOSE AND CO. LTD.

DEDICATED

TO THE MEMORY OF

GEORGE RANKINE LUKE,

LATE SENIOR STUDENT AND TUTOR IN CHRIST CHURCH
OXFORD.

Io veggio ben che giammai non si sazia
  Nostro intelletto, se'l Ver non lo illustra,
  Di fuor dal qual nessun vero si spazia.
Posasi in esso, come fiera in lustra,
  Tosto che giunto l'ha ; e giugner puollo ;
  Se non, ciascun disio sarebbe *frustra*.
Nasce per quello, a guisa di rampollo,
  Appiè del vero il dubbio ; ed è natura
  Ch'al sommo pinge noi di collo in collo.

Dante, *Paradiso*, iv. 123-32.

PREFACE TO FIRST EDITION.

THE object of this book is to give a connected view of the Critical Philosophy, showing the relations of the three *Critiques* to each other, and to the other works of Kant which may be regarded as illustrations or developments of his main argument. The first part, on the *Critique of Pure Reason*, deals with the same subject as my former work, entitled *The Philosophy of Kant*, but, except in a few passages, it is not a reproduction of it. Since the date of its publication, many important contributions to the study of Kant have been made in Germany and other countries. I wish especially to express my indebtedness to the writings of Dr. Vaihinger, Benno Erdmann, Cohen, Paulsen, Arnoldt, Stadtler, Staudinger, and Riehl; also of the late Professor Green and Professor Watson. In particular, Dr. Erdmann's publication of the *Reflexionen Kant's* has thrown much new light on the development of the Kantian philosophy, and Dr. Vaihinger's acute statement of the main Kantian *ὠπορίαι* in his Commentary is full of instruction and suggestion for every student. I have sometimes given references to these and other writers; but often I have found it impossible to recall or to trace what I owe to them, and must content myself in the main with this general acknowledgment of my obligations. I also owe much to the criticisms of my former book by various writers, particularly by Dr. Hutchison Stirling, by Mr. Balfour, and by Dr. Vaihinger; and I have attempted to meet them by giving a more careful and accurate statement of Kant's argument, and a fuller and more thorough estimate of its bearing and value. In this way I have been led,

among other things, greatly to extend and modify my view of the Principles of Pure Understanding.

The most important cause of the changes made in my former representation of the Kantian doctrine has, however, been the continued study of Kant himself, carried on mainly with the view of tracing out the connexion of his different works. For the very attempt to treat the Kantian philosophy as a whole, and to show its unity and the method of its development, made it necessary to restate the argument of the first *Critique*. Thus, in the chapter on the Postulates of Empirical Thought, I have entered at considerable length into the alterations made in the second edition of the *Critique*, and I have endeavoured to discover their causes. In doing so, I came to the conclusion that these alterations are important, not, as has been maintained by Schopenhauer and others, because they show a tendency in Kant to recoil to the point of view of the ordinary common sense Realism from an idealistic position similar to that of Berkeley; but because they indicate his progress towards an Idealism in which the subjectivity of Berkeley's theory is corrected. Here, in fact, we have one indication among others that, as Kant advanced with his work, the ultimate results of it came more clearly within his view, and even had a certain reactive effect on his conception of the earlier parts. Yet, on the other hand, we have to remember that the work of Criticism was from the first conceived by Kant as a whole, though in its execution it was divided into a number of separate *Critiques*. The effect of this was apparently to give undue prominence to special questions, and to hide for a time their relation to other elements in the great problem which Kant had set himself to solve. This concentration upon a particular point has even at times affected Kant's own point of view, producing a verbal contradiction between the statements which he made at different stages of his work. But, in spite of such inconsistencies, and of the reservations and cautions with which he surrounds himself at every step in his progress, I have attempted to show that there is an unbroken continuity in the movement of Kant's thought, and that the lesson of his philosophy as a whole is definite and self-consistent.

That lesson, however, he did not himself fully understand. He suffered for his position as the discoverer of a new way of dealing with the problems of philosophy. He had often to invent his own language, or to use old terms in new senses ; or, rather, we might say, he had to carry his readers through a series of changes which collectively amounted to a complete revolution of thought, and in doing so, he had again and again to strain the language of a doctrine already received to make it express a new idea. Urged forward by a strong tendency to the ideal, and by an original power of speculative insight which was continually fertile of new views of truth, and held back by a mind deeply imbued with the spirit of a sceptical age and carefully trained in the school of Newtonian science, Kant had a harder struggle with himself than he could possibly have had with any critic or opponent of his philosophy. And, while he expressed the result of his thought at each stage of its development in the words that seemed most suitable, he seldom turned back to compare them with what he had said before. It might, without much risk of contradiction, be contended that he never repeated himself without introducing some new modifying thought, which somewhat changed the aspect of his previous statements. To understand him, therefore, is not simply to combine different texts which exhibit the different aspects of an unchanged thought. It is to detect a consistent stream of tendency which, through all obstruction, is steadily moving in one direction ; to discern the unity of one mind which, through all changes of form and expression, is growing towards a more complete consciousness of itself.

In trying to discharge the task of a critic of Kant, it is difficult not to seem "as if we were impertinently trying to 'pull his work to pieces,'" (as Green remarked in relation to his own criticism of Locke), or to be ungratefully seeking an easy victory over him from the vantage-ground of a later time—a vantage-ground which he himself has helped to provide for us. But, as Goethe has said, the main homage which a great man exacts from those who follow him is the ever-renewed attempt to understand him. And no one who recognises that progress in speculative philosophy is a

progress to self-consciousness, and that such progress always involves a conflict between the conscious and the unconscious, even in the minds of those who are its most prominent representatives, will fail to see that the only valuable criticism is that which turns what is latent in the thought of a great writer against what is explicit, and thereby makes his works a stepping-stone to results which he did not himself attain. It was those who stoned the prophets that built their sepulchres. Those who really reverenced them, showed it by following the spirit derived from them to new issues.

One of the most difficult of the minor points which an English commentator on Kant has to decide is the question of the translation of technical terms. In most cases, owing to the different genius of the language, only a compromise is possible. This difficulty is found even in the most general word, used by Kant for any mental modification whatever the word *Vorstellung*. The term "idea" was employed in this sense by Locke and most English writers on philosophy till a recent date, and it seemed better to continue this usage than to adopt any such formal term as 'representation' or 'presentation.' The main objection is that the term 'idea' is employed by Kant himself for another purpose, with distinct reference to its original use by Plato. In this latter sense, wherever there was any need of making the distinction, I have printed Idea with a capital letter. Sometimes I have found it convenient to translate *Vorstellung* by the word 'Consciousness.' *Anschauung* I have generally translated by 'Perception,' rarely by 'Intuition,' as the term Intuition seems in English to carry with it associations which are misleading. Sometimes I have used 'Pure Perception,' where the context seemed to require it. *Wahrnehmung* I have translated by 'Sense-perception,' wherever, as in the discussion of the Anticipations of Sense-perception, it seemed necessary to call attention to its contrast with *Anschauung*. For *Begriff* I have invariably used 'Conception.'

In quoting the *Critique of Pure Reason*, I have given references to the pages of Kant's first and second editions as *A* and *B*. In most of the German editions and in Prof.

Max Müller's translation of the *Critique*, the paging of one or other of these editions is given. In quoting from Kant's other works I have referred to the editions both of Rosenkranz and Hartenstein as *R* and *H*.

The proofs of the whole of this book have been read by Professor Jones, of the University College of North Wales, and a considerable part of them by Mr. John S. Mackenzie, of Trinity College, Cambridge. To both of these gentlemen I have to express my obligations for numerous valuable suggestions and criticisms.

UNIVERSITY OF GLASGOW,
August, 1889.



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THE CRITICAL PHILOSOPHY

INTRODUCTION

CHAPTER I

THE IDEA OF CRITICISM

"THE present age may be characterised as the Age of Criticism, a criticism to which everything is obliged to submit. Religion, on the ground of its sacredness, and Law, on the ground of its majesty, not uncommonly attempt to escape this necessity. But by such efforts they inevitably awaken a just suspicion of the soundness of their foundation, and they lose all their claim to the unfeigned homage paid by reason to that which has shown itself able to stand the test of free inquiry."

Necessity of Criticism.

What is meant by Criticism in these words of Kant, and what reason had Kant for regarding Criticism as specially the characteristic of his own age? Not unfrequently the term "Criticism" is applied to a process which has scarcely any rule or principle, a process which consists simply in raising manifold objections from any point of view that may suggest itself to the theory or doctrine criticised. Such criticism may have a certain relative value because it awakens the mind from an attitude of passive reception and stimulates it to play freely round the subject in hand. But it is not a scientific process. It has no definite standard of judgment which it consistently applies. Hence its use is to prepare for a better method; and if it does not make way for such a method, it soon passes into a sophistry which can prove or disprove anything, just

What is Criticism?

because it has no principle to which it steadfastly adheres. It is criticism without a criterion, and in the end it throws light upon nothing, except perhaps upon the mind of the critic. Even upon this it throws light only in so far as it enables us to penetrate to the unconscious presuppositions on which his judgments are based.

Its relation to Dogmatism.

Now Kant undoubtedly meant something quite different from this when he called his own age the age of Criticism, and when he spoke of his own *Critique* as carrying out the work of the age to its legitimate result in the province of philosophy. What he meant we may best understand if we consider how he opposes Criticism to two other forms of Philosophy, Dogmatism and Scepticism. "Dogmatism," he declares, "is the positive or dogmatic procedure of reason without previous criticism of its own faculty;" *i.e.*, it is a system which is produced in the direct effort to understand and interpret the world—the effort of a mind which is as yet troubled by no scruples as to its own competence, or as to the efficiency of the methods and principles it uses. Such a mind, indeed, is generally unconscious of any method or principle whatever. It is too busy with its object to attend to itself. An early philosopher is described by Aristotle as looking up at the expanse of heaven, and declaring that "all is one." So by a direct effort of intuitive thought, the mind which as yet is troubled with no doubts as to the possibility of knowledge, seizes upon some general principle that seems to be as wide as the universe itself, and uses it to explain, or to explain away, all appearances. Such immediate, unhesitating action of the intelligence does not of necessity fail of a good result. Nay, it is to such action that man's first insight into the nature of things is always due. But it invariably, in the first instance at least, overshoots its mark. Lighting up one aspect of things with the vividness of intuitive presentment, it leaves the other aspects in the shade. Grasping a principle of limited range, it applies that principle fearlessly to objects which it cannot explain, and which, therefore, it only serves to distort. Especially is this apt to be the case with minds of little originality which work by an impulse, and on the lines of a thought which they have received from another. For

men of creative and original insight have generally a sense of the whole, a consciousness of the unity of things, which restrains them from unseasonable applications of a principle, though theoretically they may have laid it down without qualification or limitation. It is not from the Newtons or the Darwins that we get absolute mechanical explanations of the universe, or scholastic schemata of the whole possibilities of animal existence. But there are many men of a high, though not the highest, order of intelligence who advance unhesitatingly on any intellectual road on which they have once set out, and are able to render great service to science so long as that road leads to anything, *i.e.*, so long as they apply their method only to objects to which it is adequate. Yet it is often the fate of such men, by the very fearlessness and good faith with which they apply their key to everything, to awaken the first doubt whether it can open every lock. Pressing on under what Goethe called the "daemonic" influence of the idea that possesses them, they try to bring every region of existence under its sway, until the common intelligence refuses to follow them in their Procrustean treatment of facts. Thus the consciousness that a principle is not universal arises out of the very attempt to universalise it, and it is well if the recoil of thought does not awake scepticism as to its value and truth even within its own limited sphere.

Failure of Dogmatism.

The direct dogmatic or uncritical use of the understanding is sure at some point to find itself checked and thwarted by the nature of things. For the simple principles which first present themselves for the explanation of the world are necessarily imperfect and one-sided. If they explain phenomena, it is only within a limited range, and when they are extended beyond that range they come into contradiction with facts and even with themselves. The category which forms a sufficient guide so long as it is applied to the investigation of one definite part of the world or one definite phase of reality, is found inadequate when it is employed as a universal principle. Hence, one-sidedness here calls forth an opposite one-sidedness there, dogmatism is met by an opposite dogmatism, and in the interminable controversy which arises between the

champions of apparently opposed but really complementary ideas, each finds that the sharp dialectic which he directs against his opponent is retorted upon himself. Besides, even apart from its being assailed in this way from without, a half-truth is its own Nemesis. A one-sided dogmatism has the opposite dogmatism latent in itself. It needs only to be developed and it destroys itself. A part setting itself up as a whole, an abstraction claiming to be a complete reality, is in contradiction even with itself; and this contradiction in the end must be fatal to it. Thus the ancient dialectic gave the *coup de grâce* to the theory that "all is one," (which was interpreted so as to deny the reality of all difference,) when it showed that absolute unity is no unity at all, or that unity means nothing except in relation to difference.

It gives rise to Scepticism.

The first effect of the failure of Dogmatism is naturally the rise of Scepticism. The conflict of opposite dogmas produces a sense of hopelessness, and even, it may be, a conviction that "whatever can be asserted may with equal reason be denied." Such scepticism may be of a deeper or of a shallower nature. It may be only that superficial doubt which is the result of observing many differences of opinion, and listening to much argument on either side. It may be the sophistic consciousness that a plausible case may be made out for anything or against anything. Or finally it may be the deeper scepticism of a reasoned despair of knowledge, arising out of the consciousness that every dogmatism has latent in it an opposite dogmatism, and that the contradiction which it encounters from its opponent is only the recoil of its own logic upon itself. It is especially this last kind of scepticism to which Kant refers when he speaks of the sceptics as "those nomads of the intellectual world who will not permit any steady cultivation of the soil." Such scepticism, as Bacon said, is itself a dogmatism; "*Ephecticus ἀκαταληψίαν dogmatizavit.*" The sceptic seeks rest in negation, in the conviction that no truth can be reached. He endeavours to make his mind content itself with its subjective certitude of itself, and to repel as slavery every objective belief. In this sense the ancient Sceptics used the proverb that "he who shuns suretyship is sure," interpreting it to mean that he who

has committed himself to nothing, who rests his faith and trust on nothing either intellectually or morally, but falls back upon the bare consciousness of himself, is thereby raised above all disappointment or vexation. "*Ich habe meine Sache auf Nichts gestellt*" is the wise man's motto.

The Sceptic a Dogmatist.

Is such scepticism self-consistent, or is it vexed with a contradiction like the dogmatism it opposes? Kant maintains that the latter is the truth, and that scepticism, like dogmatism, carries in it the principle of its own refutation. It must do so, because, as already said, it is only another kind of dogmatism. When it stops short at a negative result and refuses to turn its weapons against itself, it is guilty of the very inconsequence, of which it accuses its enemy. It is really as a dogmatist that the sceptic is strong against dogmatism : it is only as asserting some principle which is common to the contending parties, that he is able to show that they refute each other. For a purely negative position is an impossibility: even a question involves an assumption; even a doubt, still more a negative conviction, must have a positive certainty behind it. If I say that all I know is appearance and that I do not, and cannot, know the reality which is beyond appearance, I must have some positive reason for the distinction which I make between appearance and reality; I must have some criterion of the latter which enables me to deny its unity with the former. If I say that I am conscious of myself and my ideas but not of objects, I assume the reality or possibility of objects independent of my thought, and also that I can sever the consciousness of myself from the consciousness of these objects. Absolute scepticism thus destroys itself. The Sceptics themselves said that it was a medicine which purged out itself as well as the disease, but they did not recognise the force of their own saying. For a scepticism that recognises its own inconsistency has at the same time recognised that it is impossible to rest in scepticism; or in other words, that scepticism ends in disclosing a fundamental belief in relation to which it is impossible to be sceptical. If the first work of scepticism is to carry us beyond opposite dogmatisms, the last work is to disclose the basis of truth on which after all it, as well as they, must rest.

But when it takes this last work in hand, it has ceased in the proper sense to be scepticism, and has become Criticism.

Relation of Scepticism to Criticism.

This last statement may be illustrated by a remarkable expression of Kant. "Scepticism," he says, "would have been a useful regress, if it had gone back over the ground traversed by the dogmatists to the point where their wanderings began."[1] Criticism is a deeper kind of scepticism, which does thus go back to the beginnings of our thought—or at least to a point logically prior to that at which the opposite dogmatic systems diverge from each other—and so gets into the straight road again. In other words, its aim is to bring the controversy to an end by detecting its sources and presuppositions. For in every controversy there must be some ground common to the controversialists, little as they may recognise it themselves. If this were not so, assertion and denial, attack and defence, would be equally unmeaning. And the value of scepticism is just this that, while using the arguments of each of the parties to refute the other, it suggests that the question at issue has certain presuppositions without the examination of which it cannot be decided. To put the same thing from another point of view, every great conflict of thought, such as that between the Ionics and the Eleatics, or between the Platonists and Aristotelians, or between the Stoics and the Epicureans, or again in modern times between the school of Locke and the school of Leibniz, is really due to the fact that opposite but complementary aspects or elements of a truth are taken for absolutely contradictory views of that truth. Such controversies arise out of the attempt to settle by a simple "yes" or "no" questions which cannot be thus simply answered. Hence each answer involves an absurdity and is open to an irresistible attack from the other side, and that disputant will be victorious who can secure the attack and force his opponents to act on the defensive. Meanwhile the sceptic draws the conclusion that truth is unattainable, or, to put it in Kantian language, that the question involves an insoluble "antinomy" of reason. The true interpretation of the facts is, however, different. A dogmatism is an

[1] R. i. 492; H. viii. 523.

attempt to explain the whole universe by a principle which applies only to a fragment or phase of it, while the opposite dogmatism denies that that principle has any validity whatever, and puts an opposite principle in its place. Finally the resulting scepticism is simply the unlimited rejection of both the opposite dogmas. But if this is so, it becomes obvious that all the combatants are fighting within a closed arena where no conclusive victory can be gained. The only way to put an end to the dispute is to break through the narrow conditions under which it has been carried on. And it is just this which Criticism seeks to do. In other words, its aim is to penetrate to the principle which underlies the controversy, to discover the more comprehensive conception which puts each of the opposing theories in its place as an element of the truth. This is a process which combines dogmatism and scepticism, yet is different from either. It is dogmatic, in so far as it recognises the partial truth of each of the dogmatic theories; sceptical, in so far as it limits each to a part; and dogmatic again, in so far as it discovers the unity which is manifested in their difference and relative opposition. It limits the validity of secondary principles which have been supposed to be primary and universal, by searching out some prior truth which is the condition of their relative validity. It is thus at once regressive and progressive, or rather, it is regressive in order to be progressive. It goes back to a principle of unity presupposed in the division of opposite schools, in order to reach forward to a comprehensive idea in which their difference is reconciled.

Philosophical Criticism.

Criticism, then, in the highest sense of the word, essentially involves an effort to get beyond the sphere in which a controversy is carried on, and to throw new light upon it from a point of view which is above that of either of the disputants, though it is also a point of view which both the disputants tacitly acknowledge. That is a true criticism which lifts a subject into the region of principle, and so frees it from the mere attack and rejoinder of ordinary controversy. A *critical philosophy*, in the sense of Kant, goes beyond this only in so far as it is an attempt to reach principles, which are prior not only to a particular

controversy, but to all controversy. As he describes it, it is a "criticism of the very faculty of knowledge," the aim of which is to determine the most general conditions of the knowable.

Its Principle.

It is obvious that of all that is knowable we must be able to predicate whatever is involved in its being knowable, and that such predicates will take precedence of all others, and will determine or limit the sense in which they are to be understood. From this point of view, therefore, there seem to be certain assertions which we may make in regard to the world and to every object in it, independently of its being actually known,—assertions which will not be altered or modified by any increase of our actual knowledge, or by any change of our view of those particular objects which we already know. "The faculty of knowledge" in this sense is the presupposition of anything known; and the criticism of that faculty, if successfully carried out, must lead to the establishment of principles which are universal, and which therefore can be used to determine the value and place in a scheme of knowledge of all secondary principles.

Locke's idea of Criticism.

The problem thus set before us by Kant seems at first sight to be identical with that which Locke endeavoured to solve in his *Essay on the Human Understanding*. On consideration, however, we find that there is an important difference, the explanation of which may serve to throw some light both on the nature of philosophical criticism and on the possibility of its object being attained. Locke conceives the question as one of Psychology. "I thought," he tells us, "that the first step towards satisfying several inquiries the mind of man was very apt to run into, was to take a view of our own understanding, examine our own powers, and see to what things they were adapted. Till that was done, I suspected we began at the wrong end, and in vain sought for satisfaction in a quiet and sure possession of truths that most concerned us, whilst we let loose our thoughts into the vast ocean of being, as if all that boundless extent were the natural and undoubted possession of our understanding, wherein nothing was exempt from its decisions, or escaped its comprehension. Thus men extending their inquiries

beyond their capacities, and letting their thoughts wander into those depths where they can find no sure footing, it is no wonder that they raise questions and multiply disputes, which, never coming to any clear resolution, are proper only to continue and increase their doubts, and to confirm them at last in perfect scepticism. Whereas, were the capacities of our understandings well considered, the extent of our knowledge once discovered, and the horizon found which sets the bounds between the enlightened and dark parts of things, between what is and what is not comprehensible by us, men would perhaps with less scruple acquiesce in the avowed ignorance of the one, and employ their thoughts and discourse with more advantage and satisfaction in the others." [1] Locke, in fact, bids us examine our faculties in order that we may discover the nature and limits of our knowledge, very much as we might examine a telescope in order to discover whether there was any flaw in its construction which might distort our vision of the objects seen through it, or any limitation of its range, which, beyond a given distance, might render it useless. Now, if this were the sense in which Kant bade us criticise our faculty of knowledge, it would not be unreasonable to object that we cannot examine the mind except with the mind, and that any defect in the mind, which might hinder us from knowing other objects or from knowing them correctly, would equally hinder us from knowing the mind itself. To this, from a purely psychological point of view, there seems to be no answer.[2] Mind, as one of the objects of knowledge, in the sense in which we contrast it with matter, cannot be taken as *the* object the knowledge of which is at the basis of all other knowledge. On the contrary, to understand mind in that sense implies that we already understand the material world. For man is a being who doubly presupposes nature, as he is a spirit which finds its organ in an animal body, and as it is in the system of nature that he finds the

[1] Essay, I. i. 7.

[2] *I.e.*, if Psychology deals with mind as one object among others. Locke, no doubt, like Berkeley, goes on the supposition that the mind knows itself by direct introspection, and that the only difficulty is how it should look beyond itself. This view, which to some extent influences even Kant, will be fully discussed in the sequel.

presupposition and environment of his life. To base knowledge on psychology would, therefore, be to base it on what is its latest and most complex result. If we knew mind in *this* sense, we should not need to look for the principle on which knowledge is built, for we should already have attained every end with a view to which such a principle is sought after. If the copestone had been firmly and securely put on the temple of knowledge, we should not be searching for its foundations.

Is Criticism based on Psychology?

Now this difficulty arises from the twofold aspect in which mind presents itself, as at once the beginning and the end of knowledge. The thinking being is not merely an object in the known or knowable world, he is also a subject of knowledge, and it is only for such a subject that an object or a world of objects can exist. Hence we may speak of man's knowing himself in two ways: of a knowledge of himself in which he is regarded simply as the self, the thinking subject which is implied in all objects of knowledge; and of a knowledge of himself as a human being, distinguished from other human beings from the animals and from nature in general, and standing in definite relations to each of them. With the latter kind of knowledge of himself, which is the subject matter of Psychology, Criticism, in the primary aspect of it, has nothing to do; for this knowledge of mind, as has been already said, is not the beginning, but rather the end, of science; and it cannot be used as a test or criterion for that which is more simple than itself. Criticism has to deal with the knowledge of mind only in so far as mind is presupposed in everything known or knowable; or, in other words, in so far as the principles which are involved in the relation of objects to a conscious self are the latent presuppositions of all knowledge, the principles through which everything else must be known, and by means of which, therefore, every other kind of knowledge must be tried. Psychology is only interested in such inquiries in so far as the fact that a conscious being, as such, is a subject of knowledge, must essentially modify our view of his relation to all other objects in a world which cannot logically be considered as existing apart from such a subject.

Or is it Metaphysical?

Now, leaving out of consideration for the present certain inadequacies in Kant's statement, it is in the sense just explained that we must take his assertion that every philosophy is a dogmatism which does not begin with a criticism of our faculty of knowledge. For, as aforesaid, all knowable objects are in necessary relation to a thinking subject; they are essentially objects-for-a-self: and this relativity makes it impossible to treat them as external to the consciousness of such a subject, or as things to which that consciousness is external, (as if objects merely happened to be in one world with certain beings capable of knowing them). From this point of view, mind is not one thing and matter another: for if by mind we mean the conscious subject, such a subject is the presupposition of the material and spiritual worlds alike. Or, to put it otherwise, we cannot speak of things as qualified in themselves apart from the accident that makes them possible objects to a subject. They have from the first involved in them the characteristics in virtue of which I know them. They could never come into my consciousness at all, unless they were from the first essentially related to consciousness. Mind does not condition them merely in the sense that thinking beings are part of the world of nature, and in that world externally act on other beings and things and are reacted on by them; but in the sense that mind is the condition of there being such a world of related objects at all. For it is manifest that, if all existence has to be defined as existence for a thinking self, in bringing to self-consciousness what is involved in this relation to a self, we are not merely explaining the relation of matter and mind as two separate objects, but showing what are the preconditions of there being any objects or knowledge of objects at all. We are, in other words, going back to the beginning of knowledge, and at the same time of the known or knowable world, when we thus go back upon ourselves.

Defect of Psychological Criticism.

The defect of the Lockian or psychological theory of knowledge, then, may be thus stated. It treats the faculty of knowledge merely as an attribute of certain beings in the world, by which they are characterised and distinguished from other beings, so that, *e.g.*, as weight is

the attribute of a stone, thought is the attribute of man; or, to use the famous saying of Cabanis, "the brain secretes thought just as the liver secretes bile." But such a view of the faculty of knowledge is essentially inconsistent with the very possibility of knowledge. It implies that acts of the mind, by which we perceive and think of objects, are to be regarded as nothing more than states of the individual consciousness as such. But if that were the true account of them, the knowledge of objects through such states, would be obviously impossible. For, how could the individual in the mere states of his own being ever find a reason for saying anything about things which *ex hypothesi* are not such states? If minds are just one sort of real things in the world, and all the acts of knowledge are merely expressions of their characteristic faculty, then they can know nothing but themselves. Knowledge, for them, must not only begin in psychology, but it must end there. To the being thus imprisoned in himself, there would be no escape; or if, by a miracle,—such as is involved in the "occasional causes" of Descartes or the pre-established harmony of Leibniz,—the ideas within should correspond with the objects without him, he could never know that they did so correspond. To take up the position of Locke, *i.e.*, to regard the mind as a separate object and to treat its ideas and perceptions as mere subjective phenomena, which may be discussed apart from all question as to an objective world presented through them, is to assume the impossibility of knowledge. For if the mind could know itself and its operations apart from the knowledge of anything else, it would *ipso facto* be shown to be a substance purely external to that world and incapable of knowing it. In other words, it would be shown to be a mind whose development to self-consciousness did not imply, and which therefore could not by any possibility attain, any consciousness of a world outside of it. It would be imprisoned in itself, not in the sense of having an imperfect or distorted vision of the world through its own subjective states, but in the sense that it would have no vision of the world at all. To make Psychology the *prius* of all other sciences, is, in other words, to say that there shall be no science but

Psychology. The principle of the Lockian criticism is such that it leaves us nothing to criticise. Its attempt to explain knowledge must become inevitably, what it did become with Hume, an attempt to explain how such a thing as knowledge could be imagined to exist. It is a criticism which leads back into scepticism.

Possibility of Metaphysical Criticism.

But, if it is impossible to take the mind as a separate existence outside of the rest of the known world, and, by examination of it, to secure a point of view from which we can look down upon our consciousness of the world and criticise it: if we cannot, apart from knowledge, examine our means of knowing,—how then, it may be asked, can we criticise knowledge at all? On what shall we take our stand in examining the process whereby we have acquired our experience and developed our present beliefs? Is it not absurd to speak of criticising our whole view of life—all that we call knowledge—when we cannot find any means of doing it except in that knowledge itself? Archimedes could not move the world, because he could find no support for his lever outside of the world itself. And it seems at first as if the idea of a criticism of knowledge in general contained a similar contradiction, the contradiction, namely, of supposing that there is a point beyond consciousness, which yet consciousness can reach, and from which it can judge itself.

Limits of Knowledge.

Now in a sense it is true—and it is of the highest importance that we should recognise it—that we cannot get beyond the cycle of "our own ideas." We can never know anything except as it is related to the conscious self within us; whatever we deal with, we are still dealing with our own consciousness of things. If anything is excluded by that, it is absolutely excluded. Of things in themselves, altogether out of relation to consciousness, if there are such things, we can know nothing.[1] We could not criticise our consciousness of things except by a second consciousness, and why should this second consciousness have any more authority than that consciousness in which they were first presented to us? The intelligible world in this sense is a closed circle within which all things,

[1] Whether Kant's things in themselves are thus unrelated to consciousness we shall afterwards consider.

or at least all things that are objects for us, are included, and to explain anything within this circle by reference to what is without it, is to use words to which no meaning corresponds. The knowable universe has no tortoise to rest on, no external handle by which it can be grasped. If any one, therefore, should choose to direct a battery of scepticism against the reality or possibility of knowledge, we cannot refute him, except by showing that the battery itself is planted within that very world of knowledge against which he pretends to direct it.

The criterion of Knowledge—where is it to be found?

And in this is already involved the solution of the whole difficulty. There is, indeed, no possibility of finding any criterion of knowledge outside of knowledge itself, no possibility of rising to another kind of consciousness which commands or looks down upon our ordinary consciousness of the world. If we raise the question of the criterion in the way in which it was raised in the Stoic and Epicurean and also in some modern schools of philosophy; if, in other words, we suppose consciousness as existing on the one side and the object on the other, as independent things which can only externally act on each other; and if we ask how the mind, conscious primarily of its own affections as such and of them only, is to get beyond itself to apprehend the object, or where it is to find the criterion by which it may test whether any, and which, of its subjective ideas represent objective reality, the answer invariably must be the sceptical one, that no such criterion can be found. We have, in fact, made the problem insoluble by the very way in which we have stated it. For we have been asking for a criterion *within* the mind of that of which the one assumed characteristic is that it is *without* the mind, in such a sense that it cannot come into any relation with mind at all. On such a question, however, the true criticism is, not that the answer is unattainable, but that the question itself is meaningless. The objects of which it speaks would cease to be what they are defined as being, if they could be known. Even to speak of them is to suppose a breach between intelligence and reality which cannot be healed, but which, for the same reason, could not be known to exist, could not even be spoken of, without an absurdity.

The question thus involves the same contradiction which has just been pointed out in absolute scepticism, *i.e.*, the assertion of a point of view outside of the intelligible world from which doubt may be directed against it.

The Particular known through the Universal.

But while it is impossible to find a criterion *within* our consciousness by which we may test its correspondence with a world, which is supposed to be outside of that consciousness; nay while the idea of such a criterion involves a contradiction, this does not imply that it is impossible to find in our consciousness a criterion of the validity of knowledge of those objects which are present to that consciousness. For all our knowledge of particular objects is based upon certain general principles, principles which flow from the nature of consciousness itself and its relation to objects in general. And if these principles are once brought to light, they may be used to test and to correct our special ideas and beliefs. Thus, *e.g.*, in all consciousness of the world, in the ordinary as well as in the scientific consciousness, we find it represented as a unity, and even, with more or less definiteness, as a systematic unity. As it is one self to which all our consciousness is related, so it is as in one world—in one space and one time—that all objects of consciousness are present to us. And the things, beings, and events of that world are, therefore, all conceived as standing in some kind of relation to each other. This, at first, may not appear to be true of the scientific consciousness, because science is continually discovering new difficulties in the interpretation of facts, and these are continually leading it to the adoption of new theories. And it may not appear to be true of the ordinary consciousness, because it makes little or no effort to interpret facts on general principles, but rather seems to take them as a confused mass of particulars, associating them just as they present themselves in space and time in individual experience. But a clearer view makes us aware that the scientific consciousness is based upon a belief in law and order which is never disturbed by the difficulty of finding a definite place for particular phenomena, but sees in such difficulty only an occasion for remoulding certain of its subordinate views of nature in accordance with fixed general principles.

And as to the popular consciousness, it is just the scientific consciousness in an inchoate state, working in ignorance or at least without distinct knowledge of the principles it uses, but none the less presupposing such principles in all its rough and ready interpretations of particular facts. Thus the categories of substance, of cause, and of reciprocal influence, are imbedded in the very grammatical structure of language, which is itself a result of the unconscious working of reason; and it is not difficult to show that the "plain man" uses them in every account of facts which he gives to himself or to others, however little he may have reflected on them, and however inconsistent or uncertain may be his application of them. They are the framework, so to speak, upon which his view of the world is laid down, the forms according to which his intelligence acts in all its acquisition of knowledge. And the man of science, with his canons of induction, by which he tries to discover or verify the true causes and interdependence of phenomena, does not essentially differ from the "plain man" in the principles by which he guides himself, but merely in the certainty and clearness of consciousness with which he applies them, deliberately employing them for a foreknown purpose, instead of simply letting himself be led by them. But both to the scientific and to the ordinary consciousness, the world is one in its manifoldness, permanent in its changes, inter-related in its coexistences; and to both, this general consciousness of unity takes effect in special attempts to connect and explain particular things and events as causing or influencing each other in definite ways. When we realise what this means, we see that it implies nothing less than this,—that all forms of rational consciousness are built on one plan, according to some ultimate principle of unity, which manifests itself in different ways of connecting phenomena in space and time as coexistent or successive, and which thus constitutes for each thinking being a world of objects and events, standing to each other and to the self that is conscious of them in definite and permanent relations.

Experience based on general principles.

Now it is just here that Criticism seeks to find the standard by which to prove all things, the criterion by

which to test all ideas that present themselves as knowledge. If human experience is built on such general principles, criticism is possible; if it is not so built, then it is impossible. For in the latter case no principle, in view of which we could criticise our consciousness of the world and of ourselves, could have more than a temporary and relative value. Criticism, in other words, is based on the idea that below all special phases of knowledge, there is a general form of knowledge, or a general "schema,"—to borrow an expression from Kant,—which we carry along with us, and by means of which, all, even the least instructed of men, impart a kind of unity to their experience. Every self-conscious being has at least some rough tests of that which he recognises as a fact; and when a new phenomenon presents itself, every such being is obliged in some way to find a place for it, to give it a local habitation and a name, in relation to all other facts in the one world of his consciousness. And this means that he has within him the general plan for a self-consistent natural system, and that he compels all things that claim to be real to take up a definite position in it. It is true, as already shown, that this plan may be, in a sense, unconscious; *i.e.*, it may never be reflected on, or made an object of attention for itself, it may reveal itself only in its effect, and not in the activity that produces it.[1] Few know that they have it in their minds at all, and fewer still would be able to define or describe it. As in the case of language the consciousness of relations shows itself in grammatical structure long before these relations are named or thought about for themselves, so it is with man's knowledge or experience of the world, of which, indeed, language is but the earliest expression. Human experience betrays its ideal character in the way in which the unity of consciousness maintains itself in and through the diversity of its contents and objects, long before there is any belief or even thought of a reign of law. Such a unity must in some way be present to the mind of man if he is to have an intelligible experience at all; or rather, we might say, it *is* his mind; as, on the other hand, the absence of it, the incapacity to put

[1] A. 104.

particular facts in their places in relation to others in one consciousness, is exactly what we mean by idiocy or madness. And this, indeed, is just the reason why we do not at first recognise this unity, and why, even when our thoughts are directed to it, it is so difficult to realise how much is involved in it. The very fact that it is the ground upon which all intelligible experience must proceed, hides it from our view. It is already behind us, so to speak, when we begin to be conscious of objects as such, since it constitutes the very faculty by which we know them. We look outwards *before* we look inwards, and we cannot look inwards *till* we look outwards any more than we can be conscious of the faculty of sight without first seeing something. And hence, although the faculty of knowledge is in a sense prior to actual knowledge of objects, the consciousness of that faculty, the consciousness of the self which knows, is posterior to such knowledge and presupposes it. Such consciousness is the product of a return of thought from the knowledge of objects upon the unity implied in it, though the self upon which we thus return is the presupposition of all our objective consciousness and therefore of all objects whatever.

A priori and *a posteriori*.

Now it is just this presupposed unity and the principles of knowledge to which it gives rise, which criticism must seek to discover, in order that by them it may test the particular elements of the knowledge or supposed knowledge which we already possess. This may be expressed by saying that Criticism has to discover the *a priori* elements of knowledge. This expression, it is true, is usually taken in another sense, as meaning that which is attributable to the mind as opposed to what it gets from experience. And when we come to treat of the special form in which the problem of criticism presented itself at first to Kant, we shall have to take account of this division of the parts of knowledge, and to discuss its validity more fully. But here, where we are dealing with the problem of Criticism in general, without reference to the peculiarities of Kant's statement of it, it may be sufficient to point out that the broad division of *a priori* and *a posteriori* elements of knowledge, according to

which the former is derived from the mind itself and the latter from without, must disappear, or at least must altogether change its meaning, so soon as the problem of criticism is understood. For the opposition of *a priori* to *a posteriori*, as different parts of knowledge, really rests on a confusion of the distinction of the subject and the object of knowledge with the distinction of mind and matter as different objects of knowledge. But so soon as it is recognised that no object of knowledge is given apart from its relation to the subject, it becomes impossible to say that any part of knowledge is purely *a posteriori*, in the sense of being due to the object as apart from the consciousness for which it is. And so soon as it is recognised that the subject comes to the knowledge of its faculty, *i.e.*, of itself, only in and through the knowledge of objects, it becomes equally impossible to say that any part of knowledge is purely *a priori*, in the sense of being present to the mind apart from all consciousness of objects. In the sense of criticism, therefore, the name *a priori* can be applied only to those elements of truth which are presupposed in all consciousness of objects—which are, so to speak, the first stones in the foundation of the temple of knowledge, or, to take another metaphor, the seeds from which all knowledge has to grow. They are, in other words, the principles through which all other truth is and must be seen, and which, therefore, are not capable of being treated like special facts or laws which are to be put on equal terms with other facts or laws.

Basis of unity in all consciousness of objects.

This view of the *a priori* element of knowledge carries us back to Kant's dictum about scepticism, which he declares to be no true criticism, because in refuting dogmatism, it did not go back to the point at which dogmatism diverged from the true road of knowledge, *i.e.*, it did not go back to the very idea of truth on which all doctrines, which profess to be true, implicitly claim to be founded. The idea before Kant's mind is that all kinds of thinking consciousness, must proceed up to a certain point along a common path; and that, therefore, there is a basis of common understanding between all minds, whether they be dogmatists or sceptics, and whatever they affirm or deny. This might be otherwise

expressed by saying that all assertion and denial must take place within the limits of the intelligible. We can disprove a particular dogma, but in doing so our attitude cannot be purely negative, any more than when we prove it. For, in the former case as in the latter, we inevitably imply, even if we do not express, some idea of truth by which we test, or in relation to which we accept or reject it. The sceptic, like all other rational beings, has his presuppositions, and he gets his apparent advantage over his adversary only because he conceals, or even perhaps is not aware of them. His advantage is simply that he strikes from the dark at an enemy in the light. Drag him from his covert, and you find that every weapon which he uses can be retorted against himself. All rational attack and defence must rest on, and appeal to, certain general principles which make the assailant and the defender intelligible to each other: and the sceptic, so soon as he begins to speak, takes his stand along with his opponent upon the general basis of intelligence. To attempt, as the Sceptic proposes to do, to deny the very idea of knowledge,—which alone makes his statement intelligible to himself and to his opponent, and furnishes the only common ground upon which they can meet,—is like attempting to wrestle with an opponent while our feet are in the air. The intelligence can no more hoist itself out of the intelligible world by any process of argument, than the body can lift itself out of the material world. On the contrary, as I have already indicated, the very effort after absolute denial which the sceptic makes, must tend to bring to light principles which his scepticism does not and cannot assail, principles which it seems able to assail only from a confusion of the universal with the particular, of the idea of truth with a particular truth.

How a critical regress becomes necessary.

The conscious need of a criticism, which shall disclose these ultimate bases of truth and thus give definiteness to the idea of knowledge, arises, as we have seen, out of the failure of the first immediate constructive effort of thought, which Kant calls dogmatism.[1] It is to the

[1] When we speak of ordinary opinion as 'dogmatic,' we are not using the term with strict accuracy. A dogma, properly speaking, must be a general principle or law.

consciousness of such failure, indeed, that we owe even the origin of science, which begins in doubt or wonder,—a doubt or wonder which is produced by the apparent inconsistency of phenomena with each other. For what such doubt or wonder betrays is that the mind has been proceeding on certain principles or presuppositions in the construction of its experience into a whole, and that in doing so, it has met with an obstacle, and has found itself unable to combine the new experience with previous experience without a change of these presuppositions. A phenomenon excites wonder because it is not what we expected, because it will not fit into a place in our general plan of things, but comes into collision with other phenomena according to the view we have been used to take of them. If we had no expectations, nothing could surprise us. Our surprise means that there is a difficulty in interpreting appearances according to the mental scheme or plan of their connexion we have hitherto adopted. But it is just such a difficulty which also for the first time directs attention to the existence of that scheme or plan, or to some element in it, which has hitherto been in operation without being specially attended to. To take an example which carries us back to an early period in the history of science. The determination of things as to their quantity must have begun with assertions as to their relative size or weight, or the relative intensity of some of their qualities. But such assertions were soon found to be wavering and uncertain, affected by every change in the circumstances of the individual who made them. The dogmatism of individual opinion, and the scepticism as to the possibility of objective quantitative judgments, which naturally arose from such collisions of opinion, ended in directing attention to the universal implied in them. A regress of thought upon this universal was therefore made by some early critical philosopher, who set himself to consider the nature of quantity in general and the principle of its determination. Arithmetic and Geometry arose out of this effort of reflection. The relations of discreet and continuous *quanta* were disentangled from the mass of concrete detail in which they had been concealed, and the abstract develop-

ment of these relations furnished a basis on which the first accurate knowledge of things, so far as they are *quanta*, could be founded. For so soon as the general principles presupposed in all quantitative judgments had been brought to light, a rule was found, according to which observations could be connected together and new results developed out of them. The *a priori* synthesis of the mathematical sciences, to use an expression of Kant, furnished a means for the anticipation of particular phenomena, the relations of which must be conformable to the principle through which alone particular quantitative judgments could be made. This critical regress upon the universal, therefore, at once put an end both to dogmatism and to scepticism, and made mathematical knowledge enter upon the "secure path of science."[1]

Science presupposes such regress.

Now similar remarks might be made in the case of all that we call science: its first occasion always lies in some collision of appearances with each other in our first synthesis of them. And the only way of escape from the doubt and difficulty thus produced has always been to discover the principle implied in such synthesis, and to develop it into a system of relations, which might serve as a guide in all particular judgments in relation to the class of objects which fell under that principle. Each science is thus the development of some general principle which was already involved in our first unreflective judgments about the subject matter of the science. As, however, in such judgments the principle in question was not present to the mind as an object, but only as an unregarded presupposition, so its application was naturally capricious and uncertain, and could not fail in the long run to give rise to difficulty and even contradiction, and such difficulty and contradiction could be removed only by bringing the presupposition to light and discovering all that was involved in it. Now all the principles of the sciences are ultimately particular developments of the one general presupposition of all science, viz., that the world is an intelligible whole. In other words, the latent assumption which every intelligence carries with it, that all phenomena form parts of one consistent system relative

[1] Cf. the preface to the second edition of the *Critique of Pure Reason*, B. x.

to thought, is the stimulus which forces us to seek for some way of reconciling apparently inconsistent facts: and it is our failure in our first attempts at such reconciliation which makes us turn our attention to the universal involved in these facts, as a principle by which the relations of particulars may be determined. It is thus that the critical regress becomes the means of a new progressive movement of science and enables it to strike into a hitherto untried path, along which it may proceed securely and rapidly without being troubled with the misgivings of scepticism or the conflict of dogmatisms.

Necessity for a new Criticism.

Science, however, soon forgets the doubt in which it arose. Once started on a definite line of inquiry, each science seems to go on accumulating truth upon truth without being obliged to retract anything it has once ascertained. It is in fact only when checked in its course that the mind turns back upon itself, nor would it ever occur to it to criticise a principle and a method which was every day being applied with success in the extension of knowledge. The question whether knowledge is possible, is precluded in such a case by the fact that it exists, and all doubt disappears before the *solvitur ambulando* of advancing science. In modern times this claim of success has been put forward with special emphasis in behalf of the mathematical and physical sciences, which have long overpassed the struggles of their youth. And a contrast is often drawn between their steady advance and the perpetual alternations of dogmatism and scepticism without any apparent progress, which has been seen in the sphere of metaphysic. How are we to account for this difference? Are we to take it as an indication that the objects of metaphysic are, essentially and in the nature of things, beyond the possibility of knowledge? And if so, how are we to account for the inextinguishable life which seems to belong to such investigations, which constantly spring up again even *in partibus infidelium*,—even in the works of those who profess to have renounced metaphysic? Or shall we take it as an indication that in this region scepticism has never gone deep enough to become criticism, and to define that universal, the reality of which seems to be evidenced by our continual tendency

to use it in particular judgments, though its definition has never been ascertained in such a way as to bring metaphysic into "the secure path of science"?

Contrast between the Sciences and Metaphysic.

It is somewhat in this form that Kant presents the problem to us in the preface to the second edition of the *Critique*. The sciences of Mathematics and Physics seem to be secure in themselves, because they exist, and because they are continually developing new results; while Metaphysic evinces a tendency to dogmatism, which is balanced by an equal tendency to an opposite dogmatism, and is, therefore, continually brought back to its beginning by scepticism.

The problem due to the advance of Science.

If we look a little closer at this result, we find, as Kant intimates, one aspect of it which may at once lead us to a clearer view of the difficulty, and put us in the way of solving it. The metaphysical problem, which gives rise to the conflict of opposite dogmatisms with each other and with scepticism, is not entirely distinct from the problem of physical and mathematical science. On the contrary, it is in the attempt to universalise the principles of such science that the metaphysical difficulty makes its appearance. These principles have a sphere in which they are continually verifying themselves by making new conquests, and therefore, the intelligence is only following a natural impulse when it tries to use them as guides in other spheres. So long as we are dealing with the material world, we find no reason to doubt their applicability; why should we hesitate to apply them to the solution of questions as to the spiritual world,—questions as to the nature of the soul, the mode of its presence in the world, and the way in which it acts and is acted upon by other beings and things? When, however, we attempt thus to extend them, when we try to apply in this new region the principles which have led to such successes in mathematics and physics, we are at once brought into collision with some of the most deeply rooted convictions of man in regard to the spiritual world; we are even led to doubt the very existence of such a world. Now, it cannot be denied that, besides and beyond the objects of the external or physical world, there are still many objects or supposed objects round which the thoughts of man have turned in

all ages. The higher interests of man, those interests that are most distinctive of man, centre, according to Kant, in the three great ideas of God, Freedom, and Immortality: or, to put it in another point of view, in the ideas of the soul, as a spiritual and self-determining subject; of the world, as a system which in all its variety and change yet maintains rational order and unity with itself; and finally of a divine unity, which is at once the source and the end of the intelligence and the intelligible world. But any attempt to apply to the objects of these ideas the principles which enable us to make the material world intelligible, is equivalent to a denial of their existence. To suppose the existence of such objects under conditions of space and time,—and they must fall under such conditions if Mathematics is to be applied to them,—involves a contradiction. To treat them as objects externally determined by other objects, according to the law of physical causation,—as would be required if they were to be brought into the sphere of Physics,—involves a still more obvious contradiction. If the soul be taken as such an object, it must be conceived simply as an attribute of the body or a series of phenomena occurring in it. We must then treat it exactly like other objects in the external world, and deny to it any independent, self-determining power. And if on this view we cannot regard the soul as standing in any exceptional position in the world, neither can we regard the world as corresponding in any special way to it, or as having in itself any unity other than that of an endless aggregation of externally determined and externally determining objects in space, which pass in consequence of this determination through definite changes in time. Nor lastly, can God be anything but another name for this aggregate. If, on the other hand, these conclusions are resisted; and if, on the ground of any spiritual functions of man's life, on the ground of the facts of knowledge or of moral action, it be maintained that the conscious subject is more than one of the facts or objects he knows, more than one of the links in the chain of natural causation, still more if it be maintained that that chain itself is but the phenomenon of a higher reality; then the principles of Mathematics and Physics

themselves seem to be brought in question; and in particular the principle of physical causality, which underlies all the achievements of modern science, seems to be deprived of its universal validity. And if it be admitted to be not *universally* valid, a doubt is thereby cast on its validity even in the sphere in which it is still allowed to prevail; at least until some higher principle is found by which that sphere may be limited and defined. In any case, the intelligence cannot rest in the conception of a dual or divided world without some principle to mediate between the different laws which are supposed to rule it; some principle which may make the dualism intelligible and at the same time carry us beyond it. It is impossible that we can be content to put two distinct principles and the spheres of their application side by side without seeking for a deeper principle to which their difference is subordinate. The same impulse, which in the first instance forced men to ask for some explanation of the inconsistency of appearances and which thereby gave rise to science, must also impel them to reconcile their conflicting consciousness of natural and spiritual reality, either by a negation of the difference between them (in other words, by the assertion that "all is spiritual," or that "all is natural"), or by the discovery of the nature of that unity, which is already in a certain sense present to our minds in so far as we are conscious of each in relation to the other.

Doubt reflected back upon Science.

A doubt of the principles of mathematical and physical science Kant considered to be irrational, if not impossible, at least so long as our minds remain within the peculiar sphere of these sciences. At the same time he acknowledged that a reflex doubt is cast both upon these principles and upon the science that is built upon them, so soon as an attempt is made to carry them beyond that sphere.[1] For this attempt, as he argued, gives rise to a conflict of dogmatisms which shows that the mind was no longer moving in the "secure path of science." Such reflex doubt, which properly affects only the *universality* of the principles involved, cannot be set aside, until we find a deeper principle, which shall at once explain the relative

[1] A. 87; B. 120.

validity of these subordinate principles in a particular sphere and their restriction to that sphere. For, so long as such a deeper principle is not forthcoming, and so long as by means of it the line is not definitely drawn, so as securely to determine the relative limits of the subordinate principles, so long doubt must hover on the borders of physical and mathematical science, and even at times make incursions upon it. Thus a doubt which would not affect such sciences taken in themselves, in so far as they make up a coherent whole of knowledge completely rounded in itself and determined by its own principles, is awakened against them so soon as we are led to suspect that the world they define is not a complete whole, but only a part which stands in necessary relation to other parts that cannot be brought under the same laws. For if this should prove to be the case, then the truth which is found in these sciences must be regarded as a truth of abstraction; or in other words, as the necessary logical result of an hypothesis, which is not absolutely or universally true. If the physical world is not really a separate world, not a complete whole limited and terminated by its own principles, these principles cannot be regarded as true, but only as the expression of a partially false, though it may be necessary, hypothesis.

Science involves abstraction.

The meaning of this statement will be better understood, if we consider that, even within the limits of the sciences in question, we find it necessary to work upon abstract hypotheses, which we have to correct as we advance by the re-introduction of qualifying truths which were for the moment neglected. In other words, we have, for the purposes of a particular science, to state as absolute or universal truth what we are afterwards obliged to acknowledge to be true only within conditions which are never exactly fulfilled. Or we are obliged to treat as whole realities, as, to use Spinoza's language, *res completae,* existences which we are afterwards obliged to recognise as incapable of being severed from their connexion with other elements in a wider whole. Thus Arithmetic, *e.g.*, is an abstract, and so far a hypothetical, science—a science based upon a hypothesis which is not absolutely true. The computations of Arithmetic would be exactly true,

only if the beings and things to which they have to be applied, the beings and things of the natural and spiritual world, were mere units, having no relations except that they are capable of being externally added to one another; and if, when thus added, they produced no further effect upon each other. Now this is not strictly true of anything in the world, not true even of two pieces of what we call dead matter, which are what they are just because they attract and repel each other chemically or mechanically, and which, when combined, are never merely the sum of their parts. It is still less true of organic beings either in their relation to each other or in the relations of their different parts. For in the case of such beings, there is a sense in which, in spite of Arithmetic, the whole is in every part. The value of the category of number descends as we ascend in the scale of existence, and, though it never ceases to have some place in our knowledge even of the highest spiritual relations, yet in regard to them it merely enables us to give a first superficial characterisation, through which we pass rapidly to more adequate views. Often, in such cases, the idea of number appears to be introduced rather to make its inadequacy an epigrammatic starting-point for the apprehension of that which is beyond number, as when it is said that "one with God is a majority"; or as in the dictum of Novalis, "it is certain that my conviction gains infinitely the moment one other soul believes with me." In all these cases, of course, the arithmetical relation is present, but in no case is it present alone, as in the numbers of Arithmetic. Hence the value of Arithmetic, in helping us to explain any phenomenon, is in inverse ratio to the complexity and comprehensiveness of the phenomenon itself. In the same way, the physical and chemical aspects of matter, as in their increasing complexity they presuppose and transcend each other, force upon us a continual correction of the abstraction which was necessary in order to the first development of special sciences. And, even to explain the simplest substance of the inorganic world, we need to reinstate the unity which we have broken up for the purposes of investigation.

Are the so-called concrete Sciences an exception?

It may, however, be argued that this abstraction, and

therefore imperfection of science, disappears, when we reach the more complex sciences which deal with actual objects in all their physical qualities. Thus it might appear that if pure Mathematics is abstract, its abstraction is corrected by Physics, and the correction is completed by Chemistry; for in the range of these sciences we deal with every quality which belongs to what we call dead matter, and though these qualities may be said to form only one part of what is to be explained in the nature of living beings, yet they form the whole nature of things that are inorganic. And the same remark might be applied to all the successive complexities introduced in the life of plants, of animals, and of men. In each stage it might be said that the scientific principles, which are abstract when regarded as explaining only part of the nature of the more complex being, and which, therefore, in that reference may be treated as hypothetical, are concrete and capable of expressing the whole truth that can be ascertained in reference to the being which is less complex. Thus the thing or being, which has no higher quality than that which it is the object of a particular science to investigate, may be fully defined without trespassing beyond the limits of that science, or introducing any categories or principles not employed in it.

Even they are abstract.

To this, however, it may be answered that, even if we confine ourselves to the natural world, it is impossible to conceive the inorganic without reference to the organic which determines it, and by which it is determined. It is true that there are objects which exhibit in themselves only what we call physical properties, but it is not true that the physical or merely inorganic can be completely and adequately comprehended without reference to the organic, with which it is united in one world. To say that the inorganic world might exist without the organic, is to turn a convenient abstraction into a *res completa*. The distinction of secondary from primary qualities, the former of which are supposed to be relative to a sensitive subject and the latter to belong to things in themselves, and the use made of this distinction in Physics, already shows us that the physical world, regarded apart from its relations to organisms, is no longer the physical world

of our experience, but a world of pure mechanical attractions and repulsions, of motions that never reveal themselves as colours or sounds, as pressure or heat, as taste or smell. And if we are still able to separate the relations of sensible objects in space, as moving and acting and reacting on each other, from their relation to the organs of sense, it is not because we can treat matter in its primary qualities as a thing in itself, independent of relation to anything not inorganic, but because these qualities more obviously involve a relation to a subject which is not merely sensitive but conscious.[1] It follows therefore, that the truths of Physics are hypothetical, not merely as regards the living organism, which is only partially explicable through them, but also as regards the inorganic world itself. We are taking for absolute truth a false abstraction—though an abstraction which is serviceable for the purposes of a particular science—when we regard the inorganic as necessary for the organic, but deny that the organic is equally necessary for the inorganic. If, therefore, there be any new principles necessary to explain the organic world, which go beyond the principles of pure Physics and Mathematics, it is a mere illusion to say that we can completely explain the inorganic world without these principles. On the contrary, all the parts of the one world, which includes both the organic and the inorganic, ultimately need for their explanation the highest category which is necessary to explain any one of them.

Can nature be explained apart from spirit?

The same idea may be still more obviously seen to hold

[1] I cannot expect that what is said above will be of itself clear or convincing. To say that the inorganic is essentially relative to the organic, and that the neglect of that relation, however useful and even necessary for the purposes of physical science, leads to an abstract and incomplete view even of matter, is a statement which involves such an inversion of ordinary modes of thought and ordinary methods of explanation that it cannot be expected to pass without challenge. And to say further that both inorganic and organic alike are relative to the unity of consciousness, in such a sense that no ultimate explanation of either can be given apart from this relation, involves not only the whole argument of Kant, but carries it to a result which even Kant never completely accepted. The main objections to such a theory and the main reasons for it will be discussed in the sequel. Here it is stated merely with a view to meet an objection and to complete the preliminary expression of that point of view which, as I think, a consistent critical philosophy must take up.

good in relation to all attempts to explain the natural world apart from its relation to the principle manifested in the life of self-conscious or spiritual beings. There is no possibility of explaining nature apart from spirit if spirit is more than merely a part of nature on a level with the other parts, or if there is anything in it that goes beyond the limits of what is in them. We cannot explain the latter without the former, unless we can explain the former by the latter. If man is not merely the child of nature, capable of complete explanation by its physical and vital agencies, then nature cannot be taken as a system which is complete in itself apart from man, or in which the presence of man is but an accident. The strange conclusion of those Physicists who, finding themselves unable to explain consciousness as one of the physical forces, were driven by the necessity of their logic to the hypothesis that consciousness produces no result at all in the world which it contemplates, illustrates this difficulty. Science must inevitably treat the spiritual either as natural or as non-existent, if it is not prepared to admit the imperfect or merely abstract truth of its own principles. There are no alternatives but either to press the physical explanations to their last result and so to reduce the spiritual world to the natural; or, on the other hand, to admit that there is, properly speaking, no such thing as a merely natural world, though in the necessary abstraction of science, we must speak as if there were one. If, therefore, it be once admitted, that there is a limit to the validity of physical explanations, and that therefore they are in a sense hypothetical, we are forced by the very interest out of which science arises, to seek for a deeper principle, in which that limit finds its explanation.

Need to 'level up' in Science.

The idea just suggested is one which we cannot stop to consider fully, still less to justify; but it may be useful to give it clearness by comparing it with the idea which is most frequently set up in opposition to it. The prevailing method of explaining the world may be described as an attempt to "level downwards," *i.e.*, to take the lowest forms of existence as the explanation of those that stand higher in the scale, and to universalise the principles

which are implied in the scientific determination of these forms. In this way it is sought to carry back Psychology to Biology, Biology to Chemistry, and Chemistry to Physics. The doctrine of development, interpreted as that idea usually is interpreted, supports this view, as making it necessary to trace back higher and more complex to lower or simpler forms of being; for the most obvious way of accomplishing this task is to show analytically that there is really nothing more in the former than in the latter. And this again seems to find a kind of empirical support in the geological or astronomical regress, which carries us back to a time when the earth was yet incapable of supporting even the simplest forms of life and when, therefore, the inorganic existed without the organic. This view of things, however plausible it may be, cannot, for reasons already partially stated, be allowed to be more than plausible. For though, by an act of abstraction, it may be possible to treat the inorganic world as if it were essentially unrelated to the organic, and though we may picture to ourselves a time when the world was still uninhabited even by the simplest forms of life, the world which we thus represent is a world of which we can say nothing, except in terms that necessarily imply a relation to that sensitive and conscious being which we pretend to remove from it. If we could carry out our abstraction to its legitimate result, we should *ipso facto* annihilate the very thought of an inorganic world, or of any world or object at all. We must, therefore, recognise that the inorganic world is only by abstraction separated from the organic, and the unconscious object from the consciousness for which it is object. Not only, therefore, must we deny that the explanation, which seems to be sufficient for matter, is sufficient for life and mind, but, since matter is necessarily related to mind, we must deny that the explanation in question is sufficient even for matter. We must, therefore, invert the method of explanation which has just been referred to, and we must say that the ultimate interpretation even of the lowest existence in the world cannot be given except on principles which are adequate to explain the highest. We must "level up" and not "level down": we must not only deny

that matter can explain spirit, but we must say that even matter itself cannot be fully understood except as an element in a spiritual world.

A critical regress necessary at every advance.

In the above statement I have anticipated the result of an inquiry which has yet to be made. For the present I shall use it only to illustrate the way in which the progressive movement of science, as it advances from the lower to the higher forms of existence, ever gives new occasion for a critical regress, in search of categories and principles higher than those which have been already used. Such a regress, as we have seen, was involved even in the first movement of thought which originated mathematical science. It was repeated in the determination of the conceptions that furnish the basis and rule for the investigations of physical science. And it has become necessary to repeat it again at the present time, because the great progress of physical science has led to an attempt to extend its principles not only to life, but even to mind. The first regress brought order into the mathematical sciences by directing attention to the pure idea of space and to the principles of its determination, as well as to all the other laws that determine the relations of things as mere *quanta*. The Pythagorean doctrine, that reality consists in numbers, expressed the consciousness of a time when this first step in science was achieved, and when it was not yet perceived that it is an explanation, not of the world as a whole, but only of one aspect of it abstracted from all the others. The category of quantity alone seemed to be needed to make all nature intelligible. It might be said with no great unfairness that the science of the Ancients never got beyond this stage, and even that the mistake was a fortunate one for the progress of that mathematical science, which was required as the first condition of all other science. But physical science could not be prosecuted with any success until the abstractness of this method of explaining things was recognised, until it was made manifest that its solutions did not apply to the material world as we know it, but only to an ideal world of pure quantity, pure space, and pure time. When this was seen, the transition from mathematical to physical conceptions became a necessity; in other words, a

principle had to be sought which should at once limit the mathematical conception of matter and bring that conception into subordination to a more complex view of it, as not merely extended but resistent, not merely passively capable of being divided and re-united, but possessed of active energy to repel and to attract. The modern philosophers, Descartes and Spinoza, were still to some extent under the sway of the mathematical synthesis of the Ancients, as is shown by their identification of matter with extension, and by their treatment of it as essentially inert.[1] But the abstract discussions in which they were engaged, and especially the controversy which arose between the followers of Descartes and those of Leibniz as to the idea of force, contain many traces of the critical process by which a new conception of the material world established itself. Such discussions were partly occasioned by the advance of physical science, but partly also they assisted that advance by making scientific men conscious of the new categories and methods necessary for the new region of investigation into which they were entering. It is only a narrow view of results without reference to the categories or principles that make them possible, that could overlook the great though indirect effect of these abstract discussions in giving distinctness of aim to science. For nature only answers the questions that are asked of her, and the reason why discoveries are made at a particular time lies, not merely in the increased knowledge of facts,—which in themselves have no meaning unless they are collected with a view to some particular problem to be solved by them,—but in that ripening of the intelligence to self-consciousness which causes certain questions to be asked, a ripening which expresses itself above all in the progress of philosophy.[2] It is perhaps a significant fact, that it was on the controversy between the Cartesians and the Leibnizians as to the nature of

[1] Spinoza still speaks of *res extensa*, though in one of his letters (70) he objects to the Cartesian view of matter as inert. To this he was naturally led by the parallelism of extension and thought.

[2] Another instance of this may be found in the development of the idea of Evolution in the writings of Kant and his Idealistic successors prior to the great scientific movement which that idea has inspired.

force that Kant wrote his first treatise. He who in his youth discerned the importance of the transition from mathematical to physical conceptions, and the necessity of subordinating the former to the latter, was destined in his age to point the way to a more difficult transition, the transition from the conceptions which are sufficient to explain the material world, taken as an independent thing in itself, to that idea of it which is necessary when it is discovered that that world has essential relations to a conscious subject.

Parallel between Kant's criticism and an earlier regress.

Now there is a certain parallelism between the two transitions just spoken of. The consciousness of the necessity of advancing from mathematical to physical principles arose in connexion with an attempt to extend the former beyond their proper sphere, and to treat them as adequate for the complete explanation of the material world. For this led immediately to a perception of the inadequacy of these principles, or in other words, of the way in which facts must be distorted in order to make them explicable by such principles. The extravagance of the Cartesian hypothesis itself awakened a protest and a controversy, which was not settled until the limits of a merely mathematical explanation of physical phenomena were established, and the idea of quantity was subordinated to the idea of force or physical causality. In like manner, the necessity for an advance beyond physical principles was first felt, when the attempt was made to extend them to a sphere in which they ceased to be adequate. Physical science had gained its triumphs mainly under the guidance of the principles of the permanence of substance, of the necessary connexion of the successive states of substances under the law of cause and effect, and of the reciprocal determination of the states of coexistent substances by each other. It was by following out the chains of reasoning suggested by these principles, that all the great discoveries of the nature of the material world had been made. But the impulse of success naturally carried scientific men beyond the inorganic, and even the material, world, and made them reluctant to admit that there was any subject to which they were inapplicable or inadequate. Hence it became

necessary to inquire whether these principles were really universal, or whether they had only seemed to be so, because they were hitherto applied to the material world alone, and even to it only from an abstract point of view from which its whole nature could not be understood. For the extension of physical principles into the region beyond Physics, was not unresisted; but on the contrary, it was met by an opposite dogmatism, already in possession of the field and supported at once by morality and religion. Further it was found that in this region the principles so fruitful in Physics could no longer be used with the same effect, but that they seemed themselves to create a dogmatic system of opinions, quite as much open to attack as that to which it was opposed. The intensity of the conflict which thus arises finds its measure only in the importance of the interests arranged on either side. On the one side, the intolerance, with which the scientific man regards any refusal to admit the universality of his method, really springs from one of the deepest intellectual instincts of man, which will not let him treat anything as truth that is not universally valid; and with this instinct is combined that confidence in his own principles which a long experience of their power to unlock the secrets of nature has naturally produced. On the other hand, those who resist the extension of these principles to the new region, though often unable to oppose to them any distinct principle of their own, are supported by a consciousness of the facts of their own spiritual life, and by a perception that these facts, which to them are the most certain of all, must be treated as illusory if the claims of science be admitted. Yet they cannot but see that a merely defensive attitude is weak and intellectually untenable, and that it is impossible conclusively to repel the scientific explanation of mind, except by showing that it is not a sufficient explanation even of matter. The world is one, and admits of only one ultimate principle of explanation, and if the claims of science are to be repelled, they must not only be resisted in one sphere but refuted in all. Each mode of thought is thus driven by an inner necessity, not only to maintain its own ground but to assail its rival, and out of the conflict arises that "Anti-

thetic of Reason," which has been the deepest source of modern scepticism. Nor can such scepticism be overcome except by a critical regress which shall discover the basis and the limits of the physical conceptions of nature, and so bring nature itself into its true relation to spirit.[1]

Greater importance of the modern critical regress.

The necessity of Criticism is, then, in a sense, peculiar to the modern time. It is true, indeed, that all the great advances of knowledge have been made on the principle of "*reculer pour mieux sauter.*" They have been regresses made necessary by the fact that the principles previously treated as universal were beginning to be found ineffectual, because they were used beyond the limits within which they are valid. But the necessity for such a regress has never before been felt so strongly, because it was never before the case that the principles claiming to be universal could appeal to such a long record of successes in the explanation of facts, and because, on the other hand, these claims never before came into collision with interests and beliefs which had so deep a hold upon the human spirit. The very development of our knowledge of the material world has forced us to ask with a new meaning whether the world is merely material, or at least, whether it can be completely explained on the principles which have been found adequate to the explanation of the material world as such. In earlier times, the consciousness of the natural and of the spiritual were, so to speak, fairly balanced against each other, or, if there was a preponderance, it was rather on the side of the spiritual. Their own consciousness occupied men so fully that nature seemed to be a mere attendant of their lives, without any independent being or power. A facile anthropomorphism either clothed natural phenomena with a vesture of humanity, or reduced them into secondary instruments of spiritual powers similar to those that ruled the life of man. Now, however, in consequence of the necessary order in which the sciences are developed, the tables have been turned. The natural sciences, just because of the greater simplicity of the principles on which they are founded, have been

[1] Cf. the chapter of the *Critique* upon "The interests of reason in this its antinomy." A. 462; B. 490.

earlier in striking into the *sichere Gang der Wissenschaft*. And their steady advance has redeemed so many and so great departments of study from the anarchy of the *intellectus sibi permissus,* and turned them into secure and intelligible possessions of human thought, that it seems all but impossible to resist their claims to pass the boundary which has hitherto been maintained against them—maintained, too, as it has mainly been, by the undrilled battalions of unscientific opinion, rather than by any rival army of science. Yet the passing of this boundary means nothing less than that spirit shall be included in nature, and that the methods and principles, which have been found sufficient to explain the latter, shall be treated as universal, and used also to explain the former. Even the maintenance of the *status quo,* still more the restoration and permanent confirmation of the old supremacy of spirit over nature, is impossible, except by a regress of thought, which shall discover at the very basis of the conception of nature a still higher principle of interpretation. If it is true that science has raised an abstraction, which includes only part of the elements of experience, into a principle for its universal explanation, this can only be shown by a deeper examination of those general principles, which are involved in the nature of the intelligence and of the intelligible world, on which science and ordinary experience alike are built, and by which all their special truths must be ultimately interpreted.

The modern Antinomy.

Criticism, in this sense, has its source ultimately in the antinomy between the principles of physical science and that unscientific consciousness of spiritual reality which is expressed in religion and morality; and immediately in the scepticism which is due to this antinomy, and which, rejecting both the unscientific and the scientific view (because of their opposition to each other), takes refuge in Agnosticism. It is an attempt to solve this antinomy by seeking out the sources of it or the unity that transcends it. It therefore seeks, in a sense, to get beneath both the ordinary and the scientific consciousness, but yet it cannot, as we have seen, propose to itself to go outside of them. It cannot find any point of view outside of experience from which to criticise it. It can only go back, in Kantian

language, upon the "conditions of possible experience or knowledge," upon the principles that are involved in every intelligible consciousness of things. It can only retrace the road of thought to the point from which the divergence of opposite dogmatisms begins, and so endeavour to find, in the general presuppositions under which we know both nature and spirit, in their opposition and in their unity with each other, the key to the inconsistency of the views which are presented to us from two opposite quarters. But, this being presupposed, we see at once the twofold bearing of the proposed inquiry, as an attempt to find a way *beyond* natural science to some conclusion or conviction, whether scientific or not, as to the things of the spirit, by going *back* upon the preconditions of natural science itself. It is an attempt to find a key to the difference and opposition of the two divergent forms in which knowledge or belief presents itself, by asking for a definition of the *genus* within which both species must fall. For it is obvious that if there is any reason for the assertion that the principles of physical science are not capable of being applied, *e.g.*, to man's moral and religious experience, this reason must be sought in the unity which embraces all forms of experience; and, if conversely there is no room left in the very idea of experience for such an opposition of its forms, the opposition must itself be pronounced to be an illusion. The freedom of spirit can vindicate itself against the necessity of nature, only if it is possible to lift the controversy into a region in which those two are no longer left dogmatically opposed to each other, but placed in due relation through the one principle which explains, the possibility of each kind of experience, or even, if it be so, of seeming experience.

Regress necessary to progress.

The result of all that has been said is thus to show the twofold nature of the work of criticism. Criticism is always the result of the fact that the intelligence has found its way blocked by some difficulty, which has awakened a suspicion against the universal applicability of the categories or methods which it had been using. In this sense criticism was at the very birth of science, and it has mediated every transition to a new point of view, by which science has widened the scope of its investigations and

brought the concrete fact of the world in its diversity and unity more definitely within the reach of the intelligence. But in a peculiar sense it may be said to be the special intellectual task of the present age, just because the special obstacle to science with which we have now to deal, lies in the opposition, and—for the ordinary consciousness at least—the fixed opposition, between the material and the spiritual world. This last and greatest division of thought against itself cannot present itself to us without awakening a perception of the greatness of the interests, which are here apparently set against each other. But as there can be no absolute oppositions within the intelligible world, *i.e.*, no oppositions which have not a principle of unity beneath their differences,—and as, indeed, such a unity is implied in the statement of any difference as an intelligible difference,—so we are obliged to think that the key to the problem, the means of reconciling the opposition or removing it, will be found, if we can clearly determine what that principle of unity is. For such a principle *must* enable us, and it alone *can* enable us, to define the opposing elements in their relation to each other, or to determine the limits of their respective validity. The critical regress thus raises a new question for philosophy, or it raises the old question in a way in which it was put by no previous philosophy. It is a regress upon the beginnings of the knowledge which we *have*, with a view to a kind of knowledge which *we have not*, at least in the form in which we desire it. For the ultimate aim of the metaphysical or ontological investigations which immediately seek only for the basis of Physics and Mathematics, in other words, of the science of nature, is to prepare the way for a new Psychology, Cosmology, and Theology—or at least, for some new determination of the natural and the spiritual worlds in their relations to each other, which shall take the place of the so-called sciences that have hitherto borne these lofty names. In short, the ultimate aim of criticism is to settle the possibility of an idealistic interpretation of the universe, and, if it is possible, to determine the form which such an interpretation must take. Immediately, it has to do with what have been called "the first things," but its ultimate aim is "the last things" of the intelligible world. It is

a new Logic which, preparing the way for a new view of man and God, casts a new light also upon nature; for, as we have seen, nature must take a new aspect if it be conceived as standing in a necessary relation to spirit and not as including it. A nature so related can be no closed system of purely physical relations; it must be conceived as part of a greater whole, and it may even be the case that, in the ultimate account of it, we may have to regard it as the necessary manifestation of spirit. To say this, however, is to anticipate the conclusion of the inquiry which we are now beginning.

CHAPTER II

KANT'S RELATION TO HIS TIME. HIS LIFE AND CHARACTER

Place of Kant in the History of Philosophy.

HEGEL speaks of certain great writers who are like knots in the tree of human development, at once points of concentration for the various elements in the culture of the past and starting points from which the various tendencies of the new time begin to diverge. In the history of thought there is no one to whom this saying can be applied with more confidence than to Kant. In the German phrase, he " makes an epoch "—the end of one mode of thought and the beginning of another. His works form a kind of bridge by which we pass from the ruling conceptions of the eighteenth to those of the nineteenth century. And the reason is, that he brings together all the elements of the thought of the eighteenth century in such a way that a new and higher thought springs from their union. To use the words of Green, he " read Hume with the eyes of Leibniz and Leibniz with the eyes of Hume," and therefore, " he was able to rid himself of the presuppositions of both, and to start a new method of philosophy." [1] In other words, he effected such a synthesis of the different tendencies of his time as carried him beyond their one-sidedness, and thereby lifted philosophical discussion to a new level. There is even some excuse for a German writer who refuses to take account of any philosophical thinker after Kant, unless he can be shown to have listened to Kant's lesson. A modern philosophy may not be Kantian, but it must have gone through the fire of Kantian criticism, or it will almost

[1] Green's Works, I. 3.

necessarily be something of an anachronism and an *ignoratio elenchi*.

The Age of Enlightenment.

How are we to describe the great change which came over human thought towards the end of the last, and the beginning of this century? In general terms we may say that it was a change from division to reconciliation, from Individualism and Atomism to a renewed perception that the whole is prior to the parts, and that individual independence must rest on social unity. Or, to put all in a word, it was the substitution of the idea of organic unity and development for the idea of the mechanical combination of reciprocally external elements. The eighteenth century called itself the "Age of Enlightenment," nor can there be any doubt that it loved light and hated darkness. But this love and this hate often misled it into denying the existence of anything which it could not see clearly. It insisted on abolishing mystery, and it regarded as mystery everything which was not finite, everything which could not be set by itself and clearly pictured by the sensuous imagination or defined by the logical understanding. It favoured a way of thinking which was clear and definite, but at the same time deficient in depth and suggestiveness. Art-critics speak of pictures as "wanting atmosphere," when the figures and forms in them stand out in hard outlines as if broken off from each other, instead of showing the graded transition and continuity of nature. A similar charge may be brought against many of the most powerful writers of the eighteenth century, who carry the desire for clearness to such a point, that they seem to make it a rule of composition that every sentence should be completely intelligible by itself, even if isolated from its context. And the same tendency limits the harmony and dries up the inspiration of poetry, producing a kind of verse, of which Pope's is the most consummate type, in which rhetorical point and emphasis takes the place of imaginative insight, and every thought and image, and almost every couplet stands stiffly by itself, so that the whole can scarcely be said to be more than the sum of the parts. The great words of the Shakesperian age, winged with music and laden with meaning, are silenced, and in place

of them we have a definite lesson, enforced in lucid and pointed language, which can be fully understood at the first hearing.

Good and Evil of the Enlightenment.

It would be absurd at this date to repeat the invectives of Carlyle against the godless age, in which religion and poetry were extinguished and mechanism took the place of life. It is almost a law of human development that men should be unjust to their immediate predecessors, from whose yoke they have had to emancipate themselves; but it is irrational to continue the injustice after spiritual independence has been secured. We can now afford to recognise the great step in the liberation of humanity which was taken in the eighteenth century; and we can do so without denying the truth of much that has been said on the opposite side. It was the age of Individualism, of Secularism, even, in a sense, of Atheism. It sought truth by dividing and isolating its parts, with the result often that the spiritual unity of truth disappeared in the process. This method was fatal to its insight into the higher life of men, and it was not without an unfavourable influence on its view of nature. For though it is that which is organic, that which has the unity of life, and above all, of conscious life, which suffers most injustice when it is treated as a mere sum or collection of parts externally related to each other, it is not possible that even the inorganic should be completely explained apart from any reference to its connexion with life and mind. For the world is one world, and it is impossible to reach the ultimate interpretation of any part or aspect of it, if we neglect its unity. Or, to put the same thought from another side, every object or system of objects must, in the last resort, be regarded as a microcosm, which is not only connected with the whole, but in some sense reflects the whole; and if we insist on treating it as a "thing in itself," as a thing which is completely determined apart from all such connexion or reflexion, we empty it of its highest meaning. The last word cannot be said of anything except in the light of the relation of all things to each other and to the mind that knows them, and the thought that neglects this ultimate relativity must in the long run narrow and externalise our view of everything.

For, while there is nothing superficially so distinct and intelligible as the finite separated from the infinite, there is nothing, when we come to think it out, so obscure and unintelligible. In truth, the clearness of isolation is really due to the ignoring of the difficulty. We can escape the endless relativity which is hid beneath the separate existence of things, only by resolutely keeping to the surface. In this sense Kant justly says that "many a book would have been more intelligible, if its author had not laid himself out to be intelligible at all costs." A writer of true insight will not be vague and indefinite; he will set one object distinctly before us, but he will not tear it from its place in the whole; he will make us feel that it reaches beyond itself and takes hold of other things. Like the healthy eye, his thought will embrace much more than that which is the immediate object in the focus of clearest vision. The world will be for him a *continuum,* and not a mere collection of independent and externally related objects.

Its place in the development of Thought.

Yet while all this is true, while the method of division and isolation necessarily tends to superficiality, and while it is impossible ultimately to separate finite things from each other and from the unity of the whole without at least a temporary loss to spiritual life, there is undoubtedly a sense in which such isolating thought is a necessary stage in the development of the human mind. The immediate, intuitive solutions of the problem of existence, which are the results of the first movement of constructive imagination and religious feeling, have this peculiarity, that they deal with the whole problem at once. They grasp the unity of the world with itself and with the intelligence without any regard to what Bacon calls '*axiomata media.*' They are everything at once or nothing. They meet every question as to the finite by relating it to the infinite. In this lies their strength and their weakness; their strength, in so far as they go at once to the centre and deal directly with the ultimate truth of things; and their weakness, in so far as it is impossible for the ultimate truth of things to be adequately apprehended, when it is thus taken at a bound, or when it does not come as the last interpretation of all other truth. The

highest unity can be reached only through a fully articulated difference, and the method of division and simplification is a necessary step in the progress of knowledge. *Divide et impera* is the motto of science. It is by abstraction and isolation of parts and aspects of the manifold world, that it becomes possible to deal successfully with the various problems it presents to us. And to separate the finite from the finite is necessarily at the same time to separate the finite from the infinite. Hence the individualism, the secularism, the dividing and dissecting methods of the eighteenth century, if in one point of view they narrowed and externalised the thoughts of men, were not without compensating advantages. If they were chargeable with an apparent, and in some respects a real, superficiality of view in relation to the deepest problems of man's existence, they quickened his apprehension of finite interests and objects. If they made his consciousness of himself and of the world unpoetic and irreligious, at least they put to flight the spectres by which his higher life had so long been haunted. If they tended to substitute the mechanical for the vital and the spiritual, yet in doing so they opened up the way for the great achievements of physical science and the industrial arts; and we have to remember that though life and spirit are more than mechanism, they are not without mechanism. To make man a free possessor of the finite world, to enable him to understand and appreciate what is present to him in immediate experience, to banish the supernatural from the natural world and bring about a secure conviction of the reign of law—these were no small gains, even if they were purchased by a temporary weakening of the consciousness of the ideal meaning of life. And even that consciousness could only gain in the long run by a process that freed man's higher beliefs from the fatal alliance of a fanaticism which confused the spiritual with the supernatural. In separating the finite from the infinite, "Enlightenment" prepared the way for a consciousness of their relations which was at once purer and more rational, less dependent upon illusions of imagination and less tainted with the base alloy of "other-worldliness."

Protest of Pietism against Enlightenment.

The eighteenth century was primarily the age of

Enlightenment. It is, however, necessary to remember that, though this was its prevailing character, the opposite aspect of the truth was never left without a witness. On the contrary, throughout the whole period we find a chain of writers and preachers, who kept up a continuous protest against the spirit of the time. The one-sidedness of those who held that "the proper study of mankind was man" and his world—and not God, and that the highest morality of man was to "cultivate his garden," was balanced by a mysticism which regarded the things of this world as nothing. Methodism in England, like Pietism in Germany, expressed that revulsion which the Enlightenment produced in all deeply religious minds. This movement, indeed, prevailed mainly among the less educated classes, and it had no great literary representatives. All the prominent literary men of the time were enlisted in the service of the reigning ideas. But it is the province of impulse, with its implicit reason, to counterbalance the defects of conscious reason. A religious doctrine which made man the passive vessel of divine grace, was the natural counterpart and complement of the isolating individualism which recognised no vital or organic relations between man and man or between man and God. This undercurrent, which ran in an opposite direction to the main stream of tendency during the whole century, cannot be left out of view in any account of its main characteristics. For it was by means of the collision and conflict of the two opposite influences, that the more comprehensive ideas of the following era were developed.

Kant's relation to his precursors.

Towards the end of the century we find many indications that this new era was at hand. In France the Revolution, which put an end to so many political compromises, was heralded by a series of writers who broke through the theoretical compromises of English Individualism. In Diderot's unlimited protest against law and authority, and his unhesitating proclamation of the doctrine that impulse is its own justification, we see the individualistic tendency carried to an extreme in which it refutes itself; while Rousseau's somewhat hesitating enunciation of the ideas of a *raison commune* and a *volontè générale,* manifesting themselves in and through the varying opinions

and wills of individuals, contains the germs of a new philosophy. In Germany the hard dogmatism of Wolff, who had popularised, and we might say vulgarised, the Monadism of Leibniz by leaving out all its deepest speculative ideas, gradually gave place to a vague and varying Eclecticism, which sought to combine the elements of many philosophies without any definite principle of reconciliation. Kant alone had the constructive power, the speculative insight, the patience, to form a true estimate of these various ideas and systems, and by combining the different tendencies of the eighteenth century, to initiate a new philosophical movement. He alone saw how it was possible to unite the characteristic ideas of the Enlightenment, and especially its rational conceptions of the order and connexion of finite experience, with a new vindication of those higher beliefs which the Enlightenment had rejected. In this sense, we may fairly say that, with the single exception of Goethe who worked in another field, Kant was the most potent of all the agents in the transition from the ideas of the eighteenth to those of the nineteenth century.

Defects of his method.

It must be added, however, that in some points Kant suffers for his position. That his writings, as above said, form a bridge between the old and the new era, implies that he cannot be regarded as strictly belonging to either. He was all his lifetime struggling to divest himself of the conceptions with which he started, and to develop another order of ideas to which, however, he was never able to give free and unambiguous utterance. It would not be altogether unfair to say that he was constantly trying to pour new wine into old bottles. He uses the dead scholastic phraseology of the Wolffian philosophy to express the living thought of the new era, and there is, therefore, a frequent struggle between his ideas and his expression of them. Hence the many controversies about his meaning, some of which it is almost impossible to settle, because that meaning is continually in process of changing and deepening, so that the letter halts behind the spirit. Sometimes his words would induce us to give him credit for all that subsequent writers have found in them, or developed out of them; sometimes they tempt us

to reduce his thought almost to the level of the dogmatism he was combatting. Such ambiguities, however, are no great hindrance to the student, if only he remembers their cause; for the important thing is not so much to find a precise interpretation for every passage, important as that may be, as to observe the direction and the manner in which his thought is developing. Often the variation of his expression at different stages is full of instruction, as it forces us to retrace the path by which he advanced and to realise the difficulties involved in the subsequent transition. Mr. Sidgwick, speaking of Political Economy, says that in that science students are apt to overrate the importance of finding correct definitions and to underrate the importance of seeking them. With still greater truth it may be said that in Philosophy results can mean little or nothing to those who have not understood the process by which they were reached. And in the interpretation of Kant, we are not merely discovering interesting facts about the individual development of a great philosopher, not merely following the steps of one of the most patient and methodical of thinkers, who never took a step in advance until he was forced onward by the growing thought within him; we are, so to speak, watching the process by which the new roads of modern thought were made. We are thus shaken out of the tendency to take for granted the ideas which are kindred with the spirit of our time instead of reproducing them for ourselves, and we are enabled to appreciate the real value of these ideas and their relation to the past. The very imperfections of Kant's statement are thus full of lessons, which we might not so readily gather from the more consistent language of those who came after him.

Slowness of Kant's mental development.

A short sketch of Kant's life may be useful as a preparation for a more definite discussion of the steps by which he found his way to the idea of Criticism. He was born on the 22nd April, 1724, in the city of Königsberg in the province of East Prussia; and during his long life of nearly eighty years he never once crossed the borders of that province. He lived a quiet, studious life of teaching and writing, never taking part in any of the great events of his time or coming into contact, except officially, with

any of the important actors in the political world. He was slow in his mental, and specially in his philosophical, development; for, though in his early manhood he published several short treatises of some importance, especially one in 1755 on the *General Natural History and Theory of the Heavens,* in which he anticipated the ideas of Laplace as to the formation of the solar and sidereal systems, his serious philosophical writing did not begin till he was nearly forty years of age, and it was not till his fifty-seventh year that he published his first great work, the *Critique of Pure Reason*; and it was during the following twenty years that he displayed his greatest literary activity in applying the principles of Criticism to Morals, to Physics, to Aesthetics and to Theology. Kant was no brilliant intellectual adventurer like Berkeley, who had already conceived and uttered almost all his distinctive ideas before he left the University. He was a slow, deep-mining thinker who had not only one great thought, but a whole philosophy almost full grown in his brain, before he began to set any part of it before the public.

Influence of Schultz.

Kant had a long and hard struggle with circumstances before he gained a position of independence. The son of a poor strapmaker, who had a large and delicate family, he seems to have owed his early education to the notice which he attracted from Franz Albrecht Schultz, an eminent pastor and professor who was also the head of the most important school of Königsberg, the *Collegium Fredericianum.* By his piety, intelligence and practical energy, Schultz had gained the thorough confidence of that strange conscientious despot, Frederic William, the father of Frederic the Great; and for about ten years he was maintained by that king as a kind of dictator of Königsberg and the province of East Prussia in all matters educational and theological. A man like Schultz, of such original force and in such a position, could not but impress the stamp of his character on the intellectual life of a city like Königsberg, cut off as it was by its remote situation from extraneous influences. And when we remember the mediating and reconciling work which Kant was to undertake, we cannot but attach some importance to the fact that his early training was directed by a teacher who was

the first, or one of the first, to conceive the possibility of combining the two great spiritual forces which were then striving for the victory in the German Universities, Pietism and the Wolffian Philosophy. Throughout Germany these two forces were opposed, and even bitterly opposed, to each other. For, as has been already indicated, the Wolffian Philosophy was a dogmatic Individualism in which the speculative elements of the Leibnizian Philosophy were discarded, and all the truths of the reason were brought to the bar of the understanding. On the other hand, the Pietists, in recoil from the rationalistic tendencies of the time, threw themselves into a religion of feeling, and denounced the natural understanding as incapable of measuring divine truth. Schultz, however, with something of a practical man's indifference to logic, endeavoured to combine the good elements in each of these opposites. He was a favourite pupil of Wolff, who is said to have singled him out as the pupil who best understood his principles, and he was at the same time deeply imbued with the spirit of Pietism. From the former he derived enlightened views of education, and a desire for a philosophical explanation or proof of his ideas; from the latter a fervid religious spirit and a belief in the efficacy of a strict and somewhat ascetic, moral discipline. His pastoral office brought him into contact with the pious strap-maker's family, and led him to interest himself in the promising boy, whom he found there and whom he admitted to his school. It is probable, though we have no evidence of the fact, that he watched over Kant's training, and did something to help him in his hard struggle with circumstances. Kant at any rate had so strong a feeling of obligation towards his former teacher, that it was one of his latest projects, a project unfortunately unrealised owing to the increasing weakness of age, to write some account of Schultz's life and services.

Influence of Pietism;

In speaking of his own boyhood, Kant was wont in later years to lay stress mainly upon two important influences: on the religious spirit of his parents, and on the good classical training which he received in the *Collegium Fredericianum*. Of the former, especially of the first simple lessons in religion which he received from his

mother, he could never speak without emotion. "The religious ideas of those times," he said to a friend on one occasion, "and the prevalent notions of virtue and piety could hardly be said to be either clear or satisfactory, but the root of the matter was in them. Say what you will of Pietism, no one can deny the sterling worth of the characters which it formed. It gave to them the highest thing that man can possess—that peace, that cheerful spirit, that inner harmony with self which can be disturbed by no passion. No pressure of circumstance or persecution of man could make them discontented, no rivalry could provoke them to anger and bitterness. Even the casual observer was touched with an involuntary feeling of respect before such men. I yet remember what happened on one occasion when difficulties arose between the strapmakers and the saddlers in regard to their respective rights. My father's interests were seriously affected: yet even in conversation the difference was discussed by my parents with such tolerance and indulgence towards the opposite party, and with such a fixed trust in Providence, that, boy as I then was, the memory of it will never leave me." [1]

and of Classical studies.

The narrowness of the strict discipline and pietistic teaching of Kant's home, which was continued in the school, found a corrective in the efficient classical training which he received from one of the schoolmasters called Heydenreich. Kant and two friends, David Ruhnken and Martin Cunde, were inspired with such enthusiasm that in the later part of their school years they used to meet several times a week for the reading of Latin authors who did not form part of the regular course; and the three boys in common resolved to devote themselves to a career of classical study. Ruhnken realised this youthful dream and became in later years a distinguished scholar; and Kant was so far influenced by it that, when he went to the University, he did not inscribe himself as a member of the theological or any other special faculty. And from these early studies he derived a good knowledge of Latin literature and a power of ready quotation from the Latin poets, which he retained to his latest years.

[1] Rink's *Ansichten*, p. 13.

Martin Knutzen.

Kant's scientific studies.

After the school years were over, at the age of eighteen, Kant began to attend the University, supporting himself mainly by teaching, with some little help from an uncle. Of his college life we know very little, except that he gained the friendship of the ablest of the Königsberg professors, Martin Knutzen, a man of no little importance in the history of the development of the Wolffian school. Knutzen followed his teacher Schultz in the effort to unite the formal method of the Wolffian philosophy with the spirit of Pietism; but while Schultz was satisfied with an external combination, Knutzen, a man of much greater speculative ability, made commendable advances towards a real philosophical synthesis of the two elements. On Kant his influence seems to have been considerable, though Kant's thought went through so great a development in subsequent years that we can scarcely find any definite traces of the ideas of Knutzen, beyond the general mediating tendency which characterised them both. What is recorded as to their relations is, that Knutzen urged Kant to the study of Newton, and gave him the use of his own large library. The advice seems to indicate that Kant's abilities showed themselves in the first instance in the direction of mathematical and physical science, rather than of philosophy. And this may also be inferred from the fact that his first work was an essay, published in 1749, three years after he had finished his University curriculum, in which he discussed the opposing theories of the Cartesian and the Leibnizian schools as to the way in which the force of moving bodies is to be estimated, and tried to find a method of reconciling them. Some six years after this youthful production, his thoughts still ran mainly in the same direction. In the *General Natural History and Theory of the Heavens*, published by Kant in his thirty-first year, he extends the theory of Newton as to the present movements of the solar and sidereal system to the original formation of those systems. At the same time, he attempts to show that this extension of the mechanical explanation of the Universe does not affect the argument from design or involve the entire rejection of final causes.

Kant as a Privat-Docent.

During the nine years before the publication of this

treatise, Kant resided as a private tutor in various families in the district near Königsberg. Of his relation to his employers or pupils we know little or nothing. He himself declared afterwards that he was one of the worst of tutors; for, though he had a clear theory as to the method of teaching, he was unable to acquire the art of making himself intelligible to children. In 1755, he returned to the University, took the degree of Doctor of Philosophy, and produced a dissertation on metaphysics as the necessary qualification for teaching. He had, however, even after this, to pass through eleven years of poverty and hardship ere he received his first small University appointment as a sub-librarian; and it was fifteen years before the struggle was ended by his appointment as a Professor of Logic and Metaphysics. During this period his name was gradually rising. At first he lectured on the mathematical and physical sciences as well as on philosophy, and his earlier publications related mainly to the former. But gradually he confined his teaching to philosophy, to which he subsequently added courses of popular lectures on physical geography and anthropology. The former of these subjects seems to have been introduced for the first time into the studies of the University by Kant himself, who, though he never left Königsberg, was an eager reader of voyages and travels. His vivid realisation of the geographical features and physical characteristics of each country, as well as of the ways of life of the people who inhabited it, made his lectures attractive to many beyond the regular students of the University, among whom may be mentioned specially the officers of the Russian garrison which held Königsberg during the third Silesian war (1756-63).

His political interests.

Frederic the Great.

A word or two may be here introduced as to Kant's relation to the political life of his time. Kant was no politician in a practical sense: so far as we know he never had to perform one directly political act. But he was a diligent student of contemporary politics, and he watched with keen interest the various phases of the political movement of the eighteenth century. He was a witness of three of the acts of what we may call the great modern political drama: he almost saw with his own

eyes the Seven Years' war, in which the great Frederic stood at bay against the combined forces of the Austrians, the French, and the Russians: he followed with the warmest sympathy the phases of the distant conflict which ended in the assertion of the independence of the United States of America: and, he lived long enough to see the French Revolution and the beginning of the career of Napoleon. The first of those great events was brought home to him, as already indicated, by the Russian occupation of Königsberg; and we cannot suppose that it had less influence upon him than it had upon others of his nation. It was, indeed, the heroic struggle of Frederic which first awakened modern Germany to a consciousness of its powers. It made Germans begin to think of themselves as a distinct people and to take pride in their language. It roused the national genius from the long sleep which had held it inactive ever since the disaster of the Thirty Years' war, and stirred it to that vigorous fermentation out of which came a new national literature. Frederic himself, indeed, was deeply imbued with French culture, and he thought of the German language as a semi-barbarous dialect, which would not be expected to produce literary fruit of any excellence. But even this, as Goethe tells us, was an additional stimulus to German authors to prove their worth to him, whom all regarded with admiration as the national hero. At any rate, it is certain that after Frederic's victory a new spirit seemed to pass into Germany, and that, for the first time since the close of the Thirty Years' war, works of permanent literary value began to be produced. First came Lessing, the scholar and dramatist, the master of literary criticism, and the beginner of philosophic theology: then Klopstock, the "German Milton," author of an imposing, though somewhat pompous and rhetorical epic and of many vigorous lyric poems; then Winckelmann, the modern Greek, whose marvellous intuition of beauty first revealed to the modern world the full meaning of Hellenic art; and Wieland, the German Frenchman, whose half romantic, half classical novels have now almost lost their interest, but who in his own time did no little to awaken the literary faculty of his countrymen. And this first

generation of authors was followed by a second of still greater power, among whom we need only mention the names of Herder and Jacobi, of Goethe and Schiller.[1]

The American War and the French Revolution.

The American war, which arose out of the attempt made in 1765 to enforce taxation in the American colonies, was an event in which we know from many indications that Kant took a lively interest. It is recorded that one day when in a public garden he was maintaining earnestly the rightfulness of the resistance of the colonies, an Englishman sprang up and challenged Kant for insulting his country. Kant answered firmly but with such calmness and persuasive force, that his assailant speedily became pacified and ended by shaking hands with him. This Englishman was a merchant, called Green, who settled in Königsberg, and became one of Kant's closest friends. Until Green's death Kant was wont to spend part of every Saturday with him, and he is even said to have submitted some of his works to Green's criticism. The French Revolution, the last great political movement which took place in Kant's time, came too late in his life to affect him greatly; but he was deeply influenced by the works of Rousseau, in which that Revolution may be said to have been anticipated. An era of political change is favourable to philosophy. It liberates the mind from the yoke of custom, and encourages it to speculate freely upon the moral principles which underlie the social order. And it was of no little importance for Kant's works that he witnessed so much of the emancipating struggle of the eighteenth century. For the Critical Philosophy is not a product of the mere study of books: it is the work of one who was alive to the spirit of the time, and who reproduced in his thought the great movement for the liberation of humanity which he saw going on without him. We may even say, without much exaggeration, that in Kant's philosophy the reason or principle of that movement was first brought to light.

Kant's Professorship and Critical Works

Kant was, as I have said, slow in finding his work.

[1] The following dates may be useful to mark the position of Kant with reference to contemporary literature:—Kant, 1724-1804; Lessing, 1729-81; Winckelmann, 1717-68; Klopstock, 1724-1803; Wieland, 1733-1815; Herder, 1749-1803; Jacobi, 1743-1819; Goethe, 1749-1832; Schiller, 1759-1805.

For though as early as 1763 he published several important essays,—which indicate that he had already broken away from the Wolffian dogmatism, and that he was seeking for light in various directions, and especially from the English philosophy of Locke and his followers,—it was not till the year 1770, not till the forty-seventh year of his life, that we can trace in his works the beginnings of the Critical Philosophy. In that year, however, in entering upon his duties as a Professor, Kant produced as his inaugural discourse an essay on the *Form and Principles of the Sensible and the Intelligible World,* which contains almost all the thoughts afterwards embodied in the *Aesthetic,* the first part of the *Critique of Pure Reason,* and also some hints of the ideas expressed in the other sections of that work. But the *Critique* itself did not appear till eleven years afterwards. After 1781, and for the next ten years, in a continuous flow of literary production, Kant poured forth the treasures of thought which he had so patiently accumulated, and worked out the application of his principles to every department of philosophy. In 1783 came his *Prolegomena to Every Future Metaphysic,* a new exposition of the ideas of the *Critique* from a somewhat different point of view: in 1785 the *Foundation of the Metaphysic of Ethics,* in which the moral aspects of his philosophy were first exhibited: in 1786 the *Metaphysical Rudiments of Physics*: in 1788 the *Critique of Practical Reason*: and in 1790 the *Critique of Judgment.* This last work, which treats of the grounds of our aesthetic judgments, and also of the application of the idea of final cause to nature and especially to the organic world, completed the series of *Critiques.* During the next ten years his only works of great importance were the treatise on *Religion within the bounds of Pure Reason* (1793), and the works on the *Doctrine of Right* and the *Doctrine of Virtue* (1797), in which Kant's moral principles are worked out in their applications to law, politics, and ethics. Besides these larger works he published a number of essays on special subjects in almost every branch of philosophy. The last books published by himself were his essay on the *Conflict of the Faculties* and his lectures on *Anthropology* (1798), though even

after that date his lectures on *Logic*, on *Physical Geography*, and on *Paedagogic* were edited under his authority by certain of his pupils. By this time Kant had become a permanent invalid. In 1797 he ceased to lecture and his memory began to fail him, and two years later he became so weak that he expressed a longing for death. A young man called Wasianski, who resided with him and took charge of his affairs, has recorded with almost too much detail his gradual decay in mind and body. In these last days Kant still tried to work at a book on the Metaphysic of Nature, but he could not distinctly express his thought and fell into continual repetitions and confusions. The slow process of death ended on the 12th of February, 1804, when he was close upon his eightieth year.

His character.

Kant was a man of feeble physique, hollow-chested and of small stature; but by adherence to strict hygienic rules which he had laid down for himself, as well as by the utmost order and regularity of life, he long preserved unbroken health and was able to get through an almost incredible amount of work. He was of a cheerful, unassuming disposition and extremely modest in his personal claims. While he deeply sympathised in the aspirations of his time after greater social and political freedom, his temper inclined him to avoid anything like rebellion against constituted authority: and the most dubious act of which he was guilty was that, in submission to an order from the government of the pietistic successor of the great Frederic, he promised during that king's reign to be absolutely silent on theological subjects. Kant met with no great outward success, and indeed almost no practical recognition of his great powers, till he had reached a comparatively advanced age: and when in later life attempts were made to draw him away from his native Königsberg by the offer of more lucrative employment elsewhere, he refused to avail himself of them. He had arranged and regulated his life, had formed his habits of living and working, and he would not let himself be disturbed by change. His long struggle with fortune taught him to be severely economical, but he never showed a trace of avarice; on the contrary he was markedly

generous to those who had claims upon his help. In his earlier life he was fond of company, and especially of the company of refined and educated women. At a later period he ceased to go into society, but he almost invariably entertained one or two friends at his table. Otherwise he sought no relaxation from the never-hasting, never-resting work, which he pursued day after day and year after year, without turning aside from the fixed rules of life which he had made for himself. With no lack of kindliness or social interest, he was one whose life always reminds us of the "categorical imperative of duty," which was for him the kernel of morals. Of no one can it be said more truly, that he purchased inner freedom by strict obedience to law and even to every limit of convention or authority, which he could recognise as reasonable. Heine draws a laughable contrast, in which there is some germ of truth, between the quiet and sober tenor of his life as an exact University official and a respectable citizen, and the world-moving power of his writings.

Heine on Kant.

"The life of Immanuel Kant is hard to describe: he had indeed neither life nor history in the proper sense of the words. He lived an abstract, mechanical, old-bachelor existence in a quiet, remote street of Königsberg, an old city at the north-eastern boundary of Germany. I do not believe that the great cathedral clock of that city accomplished its day's work in a less passionate and more regular way than its countryman, Immanuel Kant. Rising from bed, coffee-drinking, writing, lecturing, eating, walking, everything had its fixed time; and the neighbours knew that it must be exactly half-past four when they saw Professor Kant in his grey coat with his cane in his hand step out of his house door, and move towards the little lime tree avenue, which is called after him the Philosopher's Walk. Eight times he walked up and down that walk at every season of the year, and when the weather was bad or the grey clouds threatened rain, his servant, old Lampe, was seen anxiously following him with a large umbrella under his arm, like an image of Providence."

"Strange contrast between the outer life of the man and his world destroying thought. Of a truth, if the citizens of Königsberg had had any inkling of the meaning of

that thought, they would have shuddered before him, as before an executioner. But the good people saw nothing in him but a professor of philosophy, and when he passed at the appointed hour, they gave him friendly greetings and set their watches."

His method in teaching.

In his earlier days he seems to have been a very effective lecturer, as is evidenced by the enthusiastic words of Herder: but as the life of thought absorbed him more and more, the interest of personal address became less keen, and his prelections lost something of their living interest. As to his methods of teaching, Jachmann gives us a hint which is not without value in relation to the interpretation of his writings. In lecturing, Kant, he says, was wont "as it were to conduct an intellectual experiment before his audience, as if he were himself beginning to meditate on the subject. First, he set up a rough definition of the subject to be discussed, then by degrees he introduced new conceptions to modify it: step by step the explanations which had been tentatively presented, were corrected, until at last the finishing touch was given to the definition, which had been elucidated in every point of view. In this way an attentive listener not only was made acquainted with the subject, but also received a lesson in systematic thinking. But a hearer who was ignorant of the method of the teacher, and who took his first explanation of the subject for a final and exhaustive statement, to the neglect of the subsequent steps, was likely to carry away only half truths." This method was used by Kant not only in his lectures but also to some extent in his books, and it has given rise to the same misunderstanding in the latter as in the former case. It was, indeed, almost a necessity that one who had to open up a region of thought so new and unfamiliar as that of the Critical Philosophy, should begin by using the ordinary conceptions of his time, and should gradually transform them by explanation upon explanation till he lifted his readers to his own point of view. The method is one which makes Kant's works very instructive to any one who will patiently follow him in every new step, but almost incomprehensible to those who expect their author to do their thinking for them, and to present them always

with cut and dry results. Like Socrates, Kant forces his pupils to co-operate with him, and the conclusions to which he brings them are of almost no value apart from the process. Nay they may become even misleading; for Kant, as the discoverer of a new principle and a new method of speculation, was not, and could not be expected to be, aware of the full power and bearing of his own thought. The scaffolding obscures the edifice even from its builder, and of Kant even more truly than of any other philosopher it may be said that to understand him is to go beyond him. On the other hand there is at least this amount of reason in the call to "return to Kant," that there is nothing which does so much to enable us to understand any principle or way of thinking as the consideration of the conditions of its first expression.

Three periods in Kant's Mental development.

In the beginning of this chapter attention has been drawn to the general characteristics of the age of Enlightenment in which Kant's powers ripened to maturity; it only now remains to bring what is there said into more definite relation with Kant's own speculative development up to the period when the Critical idea began to take form in his mind. In that development we may distinguish three periods. In the first of these Kant is still in the main an adherent, though a somewhat restless and dissatisfied adherent, of the Wolffian philosophy, or rather of a modification of that philosophy which had resulted from the speculative movement within and without the school of Wolff. Of this stage of his thought the main record is found in the *New Exposition of the First Principles of Metaphysic* with which in 1755 he "habilitated," or qualified as a *Privat-Docent,* in the University of Königsberg. In 1763 this stage ends with the publication of three essays, which may be regarded as Kant's declaration of independence. In these essays he breaks with the Wolffian philosophy, and shows a tendency, which is even more strongly marked three years later in the treatise on the *Dreams of a Ghost-Seer illustrated by the Dreams of Metaphysic,* to adopt the principles of the Empiricism of Locke. Finally, about the year 1768-9, there is evidence of a second recoil from Empiricism towards Rationalism, and the commencement of an effort to reach a higher

point of view from which the opposition between it and Empiricism may be reconciled, an effort the first fruit of which was the *Dissertation on the Form and Principles of the Sensible and the Intelligible World.* That treatise, as above stated, was published in 1770, but it took eleven years of what we may call intellectual fermentation before the process of synthesis thus initiated was brought to a definite result in the first edition of the *Critique of Pure Reason.* And even the *Critique of Pure Reason* must itself be regarded as presenting to us only one side or aspect of a comprehensive thought which was subsequently worked out in the other *Critiques,* and that not without reactive influence on the first *Critique.*[1]

Contents of the following chapters.

In the three following chapters, I propose first to give an account of Kant's precursors, or in other words, to describe the earlier modern philosophical movement as far as is necessary to exhibit Kant's relation to it, and especially to show at what point he took up the philosophical problem; in the next place, to follow Kant through the first two stages of his development, or, in other words, through the speculations of the precritical period; finally, in the last chapter of this Introduction, to trace the steps in the development of the idea of criticism from its first dawn to the publication of the *Critique of Pure Reason.*

[1] In relation to the first two stages our main authority must be the published works of Kant, though some additional illustration is supplied by the *Reflexionen Kant's*, published by Dr. Benno Erdmann. For the third stage, the main authorities are the *Dissertation* and Kant's letters to Lambert and Herz. But valuable sidelights are supplied by the *Reflexionen* (with Dr. Erdmann's introductions) and by Politz's editions of Kant's lectures on Metaphysic and Natural Theology and Dr. Erdmann's articles in the *Philosophische Monatshefte* (vols. 19 and 20). Cf. also Cohen, *Die systematische Begriffe in Kant's Vorkritischen Schriften*, and Paulsen, *Die Entwickelungsgeschichte der Kantischen Erkenntnisslehre.*

CHAPTER III

KANT'S PRECURSORS, DESCARTES, SPINOZA, LEIBNIZ, AND WOLFF—THE LATER WOLFFIAN SCHOOL AND MARTIN KNUTZEN

The idea of Evolution as a key to the history of Philosophy.

THE idea of evolution is now so familiar, and it has lent such a living interest to the history of the past, that it is not easy to realise the point of view of those who were without that idea. Especially is this the case in relation to philosophy. To us the history of philosophy has become a part of philosophy itself, because we have learned to look on the speculations of earlier times, not as dogmatic systems to be accepted or rejected, but rather as the first stages in the progressive evolution of a thought of which, in a further stage, we ourselves are the organs and interpreters. Hence follow two important consequences. On the one hand, we are freed to some extent from historical partisanship, since we do not expect to find direct support for our own ideas in any past system: yet on the other hand, we are enabled to feel a living interest in all such systems, as containing aspects or elements of the truth which we seek to discover. We are pledged to show that the system which we regard as true, is the result of a synthesis in which those aspects or elements are combined. But to those who looked upon the history of philosophical opinion without the guiding light of the idea of evolution, that history necessarily took the aspect of a series of unrelated facts the knowledge of which could have no scientific value. They could feel a living interest only in the opinions and reasonings of those writers who were near in time to themselves, and who, therefore, put the problem of philosophy in the same

way. What lay further off they were obliged to distort into an artificial resemblance to their own ideas: otherwise it had no philosophical meaning for them. Hence, with few exceptions, philosophic writers were wont to pay little heed to any speculations save those of their immediate predecessors, and the doctrines of earlier writers were remembered, if at all, only as a dead tradition, a cipher to which the key was lost.

Unhistorical spirit of Kant's time.

This indifference to the past was specially characteristic of the eighteenth century, partly because of its violent recoil from the ideas of the previous period, partly because of the character of the ideas in which that recoil landed it. The individualistic tendencies of the age of Enlightenment, which separated each man from the unity of the social organism to which he belonged, separated him also from the past out of which his intellectual life had grown. Hence to the writers of that time the independence of philosophical thought seemed to involve that each thinker must begin the work of speculation *de novo*: and to admit the possibility or necessity of a mediation of truth to the individual by the *communis sensus* of humanity was in their eyes the same thing as to accept the dictation of an external authority. In this respect Kant shared in the individualistic and unhistorical modes of thought characteristic of his time, though it may be also said that it was a result of his work to change them, or at least to prepare the way for a deeper conception of the relation of the individual to humanity. No more than his contemporaries had he a vital hold of the remoter past. Even of Leibniz, the great thinker to whom he stood nearest, he can scarcely be said to have had any direct vision: he sees him almost entirely through the spectacles of Wolff: and if he ever gains a deeper apprehension, it is only as the advance of his own thought gradually leads to a revival of some of the elements of the Leibnizian doctrine. Spinoza's thought, as he confessed, remained an enigma to him, even after Jacobi had paved the way to a better knowledge of it. And his references to Plato and Aristotle seldom go much beyond the limits of the ordinary inaccurate tradition, which makes them respectively types of the *a priori*, and the empirical, modes of thought:

though he is conscious of a certain affinity to Plato, especially in relation to his moral ideas. The historical relations of Kant's philosophy, as described by himself, are thus limited to the Wolffio-Leibnizian system on the one side, and the philosophy of Locke, Newton, and Hume on the other. The only other great writer to whom he confesses an obligation is Rousseau, in whose ideas of a "*common reason*" and a "*general will*," we may discern some anticipation of the intellectual revolution which Kant was to carry out.

Historical relations of Kant's Philosophy.

Yet it would be a mistake entirely to limit our view of the historical setting of Kant's philosophy to the relations of which Kant himself was conscious. Kant's *Critique* was the beginning of an intellectual revolution by which a synthesis was made, not only between the different forms of Individualism which arose in Germany and England, but also between the Individualism of the eighteenth century and what may be called the abstract Universalism of an earlier period. It is no mere accident, but an indication of the same spirit of the time which was manifested in the Kantian philosophy itself, that an interest in Spinoza revived shortly after the publication of the *Critique of Pure Reason.* The way in which Spinoza's Ethics took hold of Goethe, who was above all the representative of the modern spirit, and of its characteristic ideas of organic unity and evolution, is sufficient to show this. And the fact that Kant did not recognise any such affinity, is explained partly by the manner of his own mental development, which made him regard Spinoza merely as a representative of the Dogmatism against which he had to contend. Yet it is impossible to consider that development carefully without seeing that Kant is deeply influenced by the Spinozistic idea of a universal unity, a unity of knowing and being, which through Leibniz passed as a tradition into the Wolffian philosophy, and which saved that philosophy from the Individualism, or even Atomism, to which it tended. A few words on this subject may enable us better to appreciate the modified Wolffianism of Kant's first period.

Principle of the Reformation.

The history of modern thought begins with the declaration of the spiritual independence of the individual, and

the rejection of the principle of authority. The Reformation was in principle the negation of the claim of any doctrine to be accepted by the individual, which could not find its evidence in the movement of his own reason; of any law to be obeyed by him, which could not be shown to spring from his own will. It was a return of man's spirit to itself and a rejection of all that is merely external and foreign. A truth which cannot become a conviction, one with my very consciousness of self, is no truth for me. A power, which directs my activity to an end which I cannot regard as my own good, is an external tyranny, to which I may be forced to submit but which I cannot regard as a legitimate authority. Before this assertion of the principle of freedom, of self-determining reason and self-legislative will, the dogmatic system of thought and the external system of government, which were characteristic of the middle ages, crumbled into dust. The dualistic ideas of a revelation coming entirely from without, of a transformation of man's life and nature by a foreign power, of an expulsion of nature that spirit might reign in its place, were once for all exploded. Old things had passed away: the years of man's nonage were completed, and he was no longer under tutors and governors, but master of himself and of his fate.

Its power over thought and life.

No one who looks beneath the surface of modern history can doubt the power of this idea. We all, as Hegel once said, fight "under the banner of the free spirit." Again and again, in religion, in science, in politics and in social life, it has stirred the modern world to convulsive and even fanatical efforts to rid itself of the weight of the past that was oppressing it. Before this principle the strongest systems of political and ecclesiastical order have gone down in utter ruin at the hour when they seemed most impregnable. It has been the secret of that disease of subjectivity which has infected the modern world, and has filled literature with the voice of its discontent. And on the other hand, it has been the essence of that "freshness of the earlier world" which has purified and transformed modern poetry and art and renewed the exhausted springs of emotion. Above all, it has given rise to that effort to simplify life and thought, to get rid of the meaningless

and the unreal, to come face to face with nature and man, and to banish as much as possible the merely conventional and unintelligible,—in short, to extirpate everything incapable of being brought into living relation with self-consciousness,—which is the distinguishing characteristic of the modern spirit. The whole history of modern philosophy may be regarded as an endeavour to work out the results of the same principles. Kant's protest against the admission of the "Transcendent," of that which is incapable of being brought in relation to human experience, is but a further step in the same process which was initiated by Descartes, when he sought to base all truth upon the *Cogito ergo sum* of self-consciousness.

Meaning of the revolt against Scholastic Philosophy.

From this point of view we may recognise a bond of kinship between the Reformers and those who originated the modern scientific movement. The explanation of what is within the range of the human consciousness by what is supposed to be utterly beyond it, is the one thing which they are agreed in rejecting. Luther condemns an authoritative church as standing between the soul and God in the same spirit in which Bacon afterwards condemned the abstractions of Scholastic philosophy as standing between the human mind and nature. Both demand the closest contact of subject and object, and both are equally convinced that by means of this contact, subject and object may be brought into unity without any need for a mediator. In both cases, indeed, a process is held to be necessary; a process in the one case, whereby the natural man, to whom the life of Christ is an external fact is to be converted into the spiritual man to whom the belief in Christ is one with the consciousness of himself; and a process in the other case whereby the student of nature is to free his mind from all presuppositions and prejudices, and turn it, in Bacon's language, into a pure mirror of the world. But, in the one case as in the other, the process is one which is to be carried on from beginning to end in and through the consciousness of the individual himself, without any dependence on an external authority. The circle is to be completed within the range of human perception and human thought, and to rest upon nothing

beyond it. The living experience is to be its own sufficient evidence.

Subjective freedom and objective truth.

In this way the independence of the individual mind was asserted without shutting it out from objective truth. It was admitted that knowledge is possible only through the surrender of the intelligence of the individual to a truth which in the first instance seems to be quite independent of it. "Into the kingdom of man which is based on science, as into the kingdom of Heaven, we can enter only *sub persona infantis.*" The first step towards the knowledge of the world was to give up all preconceived opinions and subjective idols which stand between us and the object. The first step towards the knowledge of God was to empty the mind of self. But, on the other hand, this simplicity of reception was not in either case supposed to imply a mere passivity of spirit. On the contrary, our first impressions of things were viewed as furthest from the truth, and an acquiescence in immediate appearance was denounced, both by Luther and Bacon, as the great hindrance to true religion and true science. In both cases an active transforming process was required, through which the mind must pass ere it could reach the truth and identify itself therewith, so as to find the evidence for that truth in itself. By this process of intellectual or spiritual activity the object ceased to be,—what in its first apprehension it necessarily was,—a merely external object, a mere fact unrelated to the intelligence: it was seen in its principle or law, and so became one with the mind which apprehended it. Hence what in one point of view was a change of the object was, in another point of view, a change of the subject. To sacrifice the mere subjective presuppositions or *idols* which stand between the intelligence and nature, was at the same time to break through external appearances and to discover the essential relation of nature to the intelligence. The surrender of reason to the teaching of Christ was in another point of view the discovery of reason in Christianity.

Luther's idea of Religion kindred with Bacon's Empiricism.

This conception of the unity of thought with its object—the sole conception which makes it possible to reconcile the possibility of objective knowledge of God or of the world with the subjective principle of freedom—was

involved in Luther's idea of Religion, and it was involved also in Bacon's Empiricism, but it was not distinctly recognised by either of them. Bacon, while he describes the method of physical inquiry and lays down the principles by which it is to be guided, has no idea of connecting that method or those principles with the nature of self-consciousness. He generally speaks as if facts were given through sense without any aid from reason, and as if any contribution of reason to the data of sense must necessarily involve a distortion of those data. If he admits the necessity of the activity of the intelligence in the apprehension of truth, it is in his conception a merely formal activity. The image of the mind as a mirror of the world seemed to him a sufficient account of its relation to its object: nor did it ever occur to him to attribute any constitutive power to thought. And Luther, while he allowed that the truth must be spiritually discerned, thinks of such discernment as the result of a divine influence, under which the soul is purely passive. It is, therefore, fair to say of both that, while they virtually asserted the unity of the mind with the object which it apprehends, they were content to *feel* that unity, without attempting to *understand* it. The implicit reason of the mind's assent to truth was not by them made explicit. How the individual, as such, can transcend his individuality; how his assurance of that which is not himself can be vindicated; how it is possible that a finite being, himself a part of the partial world, can in thought overpass the limits of his own subjective consciousness and become a "spectator of all time and existence," conscious of the world and of God; these were questions which they did not ask. Ultimately both Bacon and Luther rested on an immediate certitude of feeling, or faith. As the one felt he was dealing with reality when he was dealing with the external world, so the other felt he was dealing with reality when he was dealing with God: and the processes which were necessary to develop this knowledge, or to bring the object, which at first appears as external, into unity with the subject, were justified merely by the result. As a matter of fact, nature ceases to be a merely external existence for us when we discover its laws. As a matter

of fact, God ceases to be a mere name for the absolute Being, when we receive into our minds the Christian idea of Him. But still, even after this process, self, the world, and God have the aspect of three elements, which we find together in our minds, but which are connected by no necessary relations, or at least by relations which are felt only and not comprehended. Hence the immediate and unreflecting consciousness in all its forms is exposed to the assaults of doubt,—a doubt which may assail even the very existence of its objects. The consciousness of self may still be turned against the consciousness of an external world, or the consciousness of an external world against the consciousness of self, so long as they are not seen to be necessary to each other. Or again the consciousness of the finite may be turned against the consciousness of the infinite, and either may be used to suppress the other, so long as they are not seen to be at once distinct and necessarily connected.

Dangers of reflexion and analysis.

So soon as such doubts arise, the immediate consciousness of reality ceases to be sufficient for itself, and philosophy becomes a necessity. For that consciousness necessarily takes its objects for granted. To the religious man God, as to the scientific man the external world, are realities immediately bound up with his consciousness of self, and he has no need to seek for a bridge from the one to the other. But reflexion breaks up this immediate unity, and forces philosophy to undertake the task of showing that the different elements of consciousness are connected in one system of belief, and that it is impossible to admit one of these without being driven to admit them all. The business of philosophy is thus to cut away the ground from scepticism by exhibiting the reciprocal implication of all the principles on which the world, as an intelligible world, must rest. For scepticism, as was suggested in the first chapter of this Introduction, is never complete. Its strength always lies in turning some element of truth, the certitude of which is assumed, against the other elements. And the answer to it can lie only in showing the necessary relation of the element of truth which is thus assumed to the other elements of the system of knowledge. Thus philosophy is a kind of reasoning

in a circle, but that is no argument against it; for it is a circle beyond which nothing lies, and in particular it is a circle which includes the position of the sceptic himself.

The subjective principle of Protestantism and Descartes.

The form which scepticism has generally taken in modern times is determined by the subjective principle of Protestantism. The consciousness of self has been turned against the consciousness of the external world, or against the consciousness of God, or even against both at once. The question, therefore, has been how we are to know anything but ourselves and our own ideas; how our consciousness is to go out to other finite objects or to rise to the infinite. This point of view is clearly indicated by Descartes when he finds in the *Cogito ergo sum* the primal and invincible certitude, to which doubt can reduce us, but of which it can never deprive us. The external world is to Descartes a world not only extended and external to itself but also external to our consciousness. On it therefore, consciousness, which has for its immediate object only its own ideas, has no direct hold. Hence in spite of the clearness and distinctness of our ideas as to the relations of the extended,—a clearness and distinctness which gives rise to the certitude of mathematical science,—our belief in the existence of the extended is unable to resist the shock of doubt. As Descartes naïvely expresses it, we can imagine that some untruthful spirit is playing upon our minds and awaking in them the ideas of things that have no reality. Thus we are driven back upon the ideas which are the immediate objects of our consciousness, and upon the conscious self for which they are objects. In relation to these, it is supposed, no lying spirit can deceive us. The conscious self asserts its existence even in the very act by which it abstracts from everything else. Its self-affirmation is involved in the very possibility of doubt, and cannot itself be an object of doubt. What we can doubt is only what we can separate from the self-affirming ego, which is as it asserts itself and asserts itself as it is. But the end of doubt is the beginning of knowledge, and in the *Cogito ergo sum* we have a first unity of thought and being, out of which a complete reconciliation of them may spring.

Descartes' transition from finite to infinite.

Self-consciousness, then, is the starting point or *princi-*

pium cognoscendi, from which we must start and on which we must base all other forms of consciousness. As, however, Descartes begins by separating the consciousness of self from the immediate consciousness of the external world, it is obvious that he cannot bring them together again except through some *tertium quid.* And of this *tertium quid,* which is to form the connecting link between the consciousness of self and the consciousness of the world, there must be a certitude as immediate as that of the consciousness of self. Descartes, therefore, is necessarily driven to the assertion that the consciousness of God is directly involved in the consciousness of self and indeed is prior to it. "Let us not imagine," he declares in one remarkable passage, "that the conception of the infinite is got merely by negation of the finite, just as we conceive rest to be the negation of movement and darkness to be the negation of light. On the contrary we obviously think of the infinite substance as having more reality in it than the finite substance: nay, it may even be said that our consciousness of the infinite is in some sense prior to our consciousness of the finite or, in other words, that our consciousness of God is prior to our consciousness of self. For, how could we doubt or desire, how could we be conscious that anything is wanting to us, and that we are not altogether perfect, if we had not in ourselves the idea of a perfect being in comparison with whom we recognise the defects of our own nature?" In this passage the method of abstraction which Descartes followed, when he separated the consciousness of self from the consciousness of the object, is carried a step further. He now, in effect, bids us abstract from the distinction of the *ego* from the *non-ego,* on the ground that that distinction is a mere limit or negation; and he maintains that the consciousness of the absolute unity which we thus reach is prior to, and presupposed in, the consciousness of any finite object, even the self. In apprehending this absolute unity, therefore, we are lifted beyond the distinction of self and not-self, of the thinking and the extended substance, and through it we are enabled to connect the latter with the former. Thus the difference, which was absolute from the point

of view of the finite, disappears altogether from the point of view of the infinite. The effect of this method of reasoning was, it must be acknowledged, very imperfectly seen by Descartes himself, who saves himself from self-contradiction by many loose and popular ways of expression. Thus failing to recognise that, according to his own statement, the opposition of thought and being disappears in God, who as an object of consciousness is prior even to the self, he proceeds to speak of the thought of God as only one of the ideas of the self, which requires an adequate reality as its cause. And instead of saying that in the consciousness of God, who is the absolute unity, the division between the self and the not-self disappears, he tells us that the truthfulness of God is our pledge for the objective reality of our "clear and distinct" ideas of that extended substance which is the object of our perceptions. But here as often, the disciples betray the secret of the master. When Malebranche spoke of "seeing all things in God," he was only giving a more vivid expression to the idea that the consciousness of God is the connecting link between the consciousness of self and the consciousness of the world. And Spinoza was only following out the same thought to its necessary result, when he put the idea of God at the head of his system as at once the *principium essendi* and the *principium cognoscendi* of all that is and is known.

Relation of Spinoza to Descartes.

The philosophies of Descartes and Spinoza, in one point of view, are polar opposites, but they are only the opposite poles of the same thought. They exhibit, in the language of pure thought, the same dialectical movement by which Luther, the apostle of the rights of the individual conscience, became also the asserter of the absolute passivity of man in relation to God. The necessity of resisting all merely external authority was forced on the individual by the consciousness of a divine voice speaking within him, which he could not disobey: he could only gain sufficient power to resist the world by regarding himself as the mere organ of the divine will. His strength against men was the counterpart of his absolute surrender of himself to God. In philosophy this connexion of ideas reappears in a slightly different form. The individual has become con-

scious of himself as an independent thinking being, and refuses to accept anything as true for him which is not mediated by his own thought: but this very return upon himself—this refusal to admit any belief that comes to him merely from without—is possible for him only because he is *not* a merely individual being who stands in an external relation to other individuals, but one who has the universal principle of knowledge bound up with his consciousness of himself. There would be no possible escape from the limitations of self-consciousness, if it were not in some sense true, as Descartes puts it, that the consciousness of God is prior to the consciousness of self, *i.e.*, that the unity, which all consciousness presupposes, is a principle of unity for all things and not for the inner life of the individual alone. It is in virtue of this that the individual is able to abstract not only from external objects but from himself also as a mere individual subject: as, on the other hand, it is in virtue of this that he is able to know these external objects in relation to himself and himself in relation to them. Hence, we cannot know ourselves apart from, or prior to, other things: nor is it possible that we should be conscious of our own ideas *as* our own ideas prior to, and independent of, other objects. So far Spinoza was right in holding that the true starting point of thought is not in the consciousness of self as a *principium cognoscendi* separate from God who is the *principium essendi*. It is only as the "spectators of all time and existence" that we can know anything even of our own existence: and the beginning of knowledge cannot be the separate consciousness of our own inner being, which has no meaning except in relation to an outer being from which we distinguish it. We do not know ourselves first and the world through ourselves; but we know ourselves only in relation to, and in distinction from, the world: and we know both through their relation to the one principle of unity which underlies all knowledge.

Spinoza's negation of the Finite.

Spinoza, therefore, is not without justification in his substitution of a metaphysical for a psychological principle as the basis of philosophy. At the same time it has to be acknowledged that the process by which this substitution is made, is defective in its logic, and that its result

is, therefore, to suppress, rather than to solve, the problem. For, as will be remembered, the problem was to find a synthetic principle by aid of which the consciousness of self should be connected with the consciousness of objects which were supposed to be external to the self. And the solution was found in a unity which was reached by abstraction from all differences, even the difference of self and not-self. The principle already laid down by Descartes, but seen in its full bearing only by Spinoza, that *omnis determinatio est negatio, i.e.*, that all definition and determination is the limitation of a presupposed positive being by a negation or an unreality, led directly to the conclusion that the only thing real in the proper sense of the word is that being which is absolutely indeterminate, without distinction or limit; and that the only truth which is unmixed with illusion is the thought which apprehends such being. Abstraction then becomes the sole method of knowledge, and all distinctions, including the distinction between self and not-self, between thought and extension, are transcended only because they are all set aside. Spinoza struggles against this result, and, indeed, we may say that he has an intuitive perception of the way to escape it, when he converts the idea of a substance or purely indeterminate being into the idea of a *causa sui* or self-determined subject "with an infinite number of attributes." But he never saw the distinction between these two conceptions of the ultimate unity, which in the subsequent development of his system are treated as interchangeable. Thus thought and extension appear as absolutely unrelated expressions of the one substance, which is simply identical in both its expressions (though at the same time thought is conceived as a consciousness of extension as well as of itself). The result is that the principle of unity, placed at the beginning of the Ethics, does nothing to explain the difference subsequently introduced. Being and knowing, or extension and thought, are set side by side, and the reality of their difference is denied, but nothing is done to mediate between them. Even in the definition of substance as *id quod in se est et per se concipitur* there is no connexion between the two members. The abstract assertion of the unity of all things

in God does nothing to break down the absolute dualism of the world. To see things *sub specie aeternitatis* is simply to forget a difference which is found to be as hard and insoluble as ever, when we return to it again. It is like a Sunday confession that the things of this world are naught, while we treat them as absolute realities all the other days of the week.

Reassertion of the finite in the Eighteenth century.

The truth of the philosophy of Descartes and Spinoza lay in their assertion that the unity of the consciousness of self and of the world must be mediated by the consciousness of God, or in other words, that it is only in so far as the unity of the consciousness of self is a principle which is presupposed in "all objects of all thought," that knowledge is possible. The error of that philosophy was, that this principle was reached by abstraction and conceived in an abstract way "as substance not as subject," as a mere common element or logical genus, and not as a principle of unity in difference. But such a direct effort to suppress difference only makes the difference develop into contradiction. For a common element is no bond of union, and the abstraction that separates it from the elements that are not common only causes the latter to fall asunder in hopeless opposition. Hence the result of this first effort at an immediate reconciliation between the object and the subject, through consciousness of the unity which is above their difference, was only to discredit that consciousness. The idea of God or the infinite, which in Spinoza had all but suppressed the consciousness of the finite world and of the finite self, begins with those who follow him to empty itself of its contents; and what is lost to the infinite is gained by the finite. Nominalism takes the place of Realism; the individual becomes everything, the unity in which all individuals are held as parts of one whole becomes nothing. The universe is represented as a collection of isolated beings or things with no vital connexion; for the God who holds them together is conceived as a mere external creator and governor, and rapidly sinks into an unknown and unknowable *Etre Suprême*, which it matters little to assert or to deny. Hence also the answer to the problem of knowledge is sought in a different way. The psychological point of

view gains at the expense of the metaphysical, and instead of "seeing all things in God," it now becomes received almost as an axiom that we must see all things,—and God also, if we can see Him at all,—in ourselves. Whether it is through the sensations which outward objects have produced in our minds, or through the ideas which spring directly out of our own consciousness, that we come to a knowledge of other things, is still a much debated question: but no question is raised as to the truth that the individual has immediately to do only with that which belongs to his own individual self-consciousness, and that the world of finite things which is close to him, as well as the existence of God which is more remote, can be reached merely by inference.

Individualism necessarily leads to Scepticism.

Such an individualistic way of thinking was predestined to end in Scepticism, whether it took a sensationalistic or an idealistic form. If it took the former, it must end in resolving our consciousness of the world as given into a mere flux of sensations without connexion or relation; if it took the latter form, it must end in the admission that the conscious self by the mere repetition of its identity with itself can never manufacture any knowledge of objects. In either case the exclusion of any consciousness of the universal, as a principle which manifests itself in the difference of the subjective and the objective consciousness and at the same time binds them together, is fatal to the possibility of knowledge. Without such a principle "things cannot migrate into our consciousness," nor can our consciousness go out of itself to enter into them. Neither the passivity nor the activity of the mind can enable it to escape from the prison of individuality to which it has condemned itself. It cannot by thinking "add a cubit to its stature," nor can any power in the universe draw it beyond the limits of its own finite existence. Unless the consciousness of the not-self be from the first bound up with the consciousness of self, it is hopeless to attempt to join them. The primary gulf between the self and the not-self cannot be bridged by one who remains *ex hypothesi* fixed at one side of it. On the other hand, if this hypothesis is not tenable, and if the consciousness of self has the consciousness of the not-self

bound up with it, it is obvious that the subjective principle must, when fully worked out, come into contradiction with itself. Even the consciousness of self must become illusory to one who divorces it from its necessary counterpart.

Critical reassertion of the universal as implied in the particular.

The whole history of both the great individualistic schools of the eighteenth century is an illustration of the logic by which the individual, conceived as immediately conscious of himself and of himself alone, is gradually driven to surrender all hold upon objective reality. And the critical reaction of Kant may be described in general terms as a reassertion, though it may be a still imperfect reassertion, of the truth that there is a universal principle underlying all consciousness, in virtue of which it can transcend itself and apprehend objective reality. This reassertion was, however, not a simple revival of the point of view of earlier philosophy. For, in the first place, the individualistic protest against a merely abstract and formal philosophy had not been wasted. It was no longer possible to be content with a speculation which dissolved the finite self and all that is finite in the infinite. By the advance of physical science and of the industrial arts, by the development of a free social and political life, the consciousness of the worth and dignity of the individual and of all the immediate interests of his existence had been so fully developed, that it had now become impossible to return to mediaeval Realism, even by the circuitous path of Descartes and Spinoza. The consciousness of the universal *might* be re-established as the basis of the consciousness of the particular, but the former could no longer be set in opposition to the latter, or used to suppress it. The only universal which could now be accepted was one which should furnish a principle of synthesis among the particulars, a principle of unity in difference. If any idea corresponding to the consciousness of God in the Cartesian and Spinozistic system was again to be placed at the head of the system of philosophy, it must not be the idea of an *ens realissimum*, a substance without limit or determination, but the idea of a self-determining subject. In the second place, as the system of Kant grew up in close relation to the subjective individualism of the previous

period, even to the last it retained traces of its origin. Its modes of expression, its whole armoury of metaphorical formulas, all its external framework or scaffolding were borrowed from the philosophies in room of which it came. Furthermore, it was the work of one who fully appreciated the valuable results of the "Enlightenment" both on the scientific and the political side, and who had not the slightest wish to undermine it, but rather sought to make manifest the deeper foundation upon which it rested. Kant was called by Hamann the *Alles-zermalmender,* "the man of crushing dialectic," and Heine, in a passage already quoted, speaks as if this were his main characteristic. But his crushing dialectic was used only against the hollow logic of Wolffian dogmatism, the removal of which was necessary to make room for a great constructive effort of speculation; and in regard to the genuine scientific work of the eighteenth century, he was only anxious to show that it rested upon principles, which carry us beyond its own limitations. Kant was no revolutionist who rode to success on the top of a wave of reaction by which one half truth was set up in the place of its opposite. He was, so to speak, an organic reformer, whose aim was to remould the accepted doctrine by bringing into prominence the neglected truth which was its necessary complement. The main accusation we can make against him is, not that he did not sufficiently respect the sound elements in the system of thought which he inherited, but rather that he did not see the full extent to which they must be modified by the new elements he introduced. Thus he stops short of the necessary end of the process of transformation which he initiates. But this, which is the defect of his philosophy as an ultimate result, is also that which gives it most value as bringing before us the whole process of the great transition, of that synthetic movement by which philosophy at the end of the eighteenth century was raised to a new point of view.

The Leibnizian Individualism.

Kant appears in the first period of his intellectual development as the supporter of a peculiar modification of the Wolffian philosophy, a modification produced by the effort to bring its principles into harmony with scientific ideas derived from Newton. Although, there-

fore, we shall have in the sequel to deal with the special points of contact between the critical and other philosophies, it is necessary to say a few words here to show the exact point at which Kant took up the speculative problem. The history of the development of philosophy from Leibniz to Wolff, like the history of its development from Locke to Hume, is a history of the progress of Individualism to its necessary consummation in Scepticism. This negative movement of thought, indeed, is not so obvious and manifest in the former case as in the latter. Still, in spite of the formal completeness and comprehensiveness which is maintained to the last in the system of Wolff, we have not much difficulty in unveiling the character of the process by which the individual was gradually separated from the universal, till he ceased to have any content or meaning in himself. Leibniz developed his individualism under the immediate influence of Spinoza. Hence he saw the necessity of providing for the unity of the individual with the whole of which he is a part, and especially for the relation of the individual to the world which he knows. His individual substances or monads, are, therefore, conceived as in some sort universal. Each monad *ideally* includes, while it *really* excludes the whole universe: if it is independent of the world, it is because in a manner it contains the world in itself. Leibniz lays great emphasis on both of these two points of view. On the one hand, the universe is merely a collective unity, and in all its apparent complexity and continuity there is no reality except that which is found in the isolated individuals of which it is made up. "There can be nothing real or substantial in the collection, unless the units be substantial." [1] And these units are absolutely impenetrable to all influences from without. "They have no windows through which anything might go into them, or go out of them." [2] Each is a little world developing under its own laws "as if there were nothing in existence but itself and God." [3] And the exception made in favour of God is, as we shall see, an unexplained mercy. On the other hand, each monad in itself "represents," or "expresses," the whole universe. It is a "living mirror,

[1] Erdmann's *Leibniz*, 714. [2] *Id.* 705. [3] *Id.* 127.

gifted with an internal activity, whereby it represents the whole universe according to its particular point of view, and in such a way that its ideal universe has all the regularity of the real one." [1] It is "like a separate world, sufficient for itself, independent of every other creature, enveloping the infinite, expressing the Universe; and it is as durable, self-subsistent and absolute as the universe itself." [2] Finally the connecting link between these two opposite aspects of the world is the "pre-established harmony," or, in other words, it is God, the universal principle of unity, who is Himself the first of monads, and who so constitutes the other monads that their inner lives shall move in unison, and that the ideal picture of the world which is present in each shall correspond to the reality.

Real separation and ideal unity of monads.

These are the three main aspects of Monadism, and it will enable us to understand the weakness as well as the strength of the system, if we devote a few words to each of them. If we follow out the idea of the real separateness of the monads from each other we are obliged to conceive the world as a collection of absolutely unrelated units. Real continuity, *i.e.*, a complexity which is not resolvable into indivisible units, is on this principle impossible. Hence Leibniz denies the reality of space and extended matter. For the extended as such is continuous and infinitely divisible. The Atomists, attempting to reach individual substance, fell into the error of supposing the existence of something in space, which yet was without parts. But their failure only shows the impossibility of finding a real unit in space. The real units or monads, therefore, must be unextended; and the conceptions of space and extended substance are "confused ideas": and they are connected with other confused ideas, viz., the ideas of time, of motion, as well as of the external determination of one substance by another. In reality monads have only internal determinations, or in other words, "perceptions," and their relations are limited to correspondence in these perceptions. The world in time and space is merely a phenomenal world, *i.e.*, a world apprehended through the confused perceptions of sense,

[1] Erdmann's *Leibniz*, 714. [2] *Id.* 128.

and not through the clear and distinct conceptions of the understanding. The external world is, indeed, no mere illusion: it is a *phenomenon bene fundatum*, a coherent and connected appearance, subject to definite laws which are exhibited in substantial and physical science. Nay, the connexion of phenomena in time and space is in perfect correspondence with the connexion or harmony of real things, though the former is determined in accordance with the law of efficient, and the latter with the law of final, causation. In other words, all monads are determined from within, but their self-determination corresponds exactly with an apparent determination from without, which takes place in their phenomena as perceived by us in space and time. "*Les âmes agissent selon les loix des causes finales par appétitions, fins et moyens. Les corps agissent selon les loix des causes efficientes, ou des mouvements; et les deux règnes, celui des causes efficientes, et celui des causes finales, sont harmoniques entre eux.*"[1] They are harmonious, because the latter is the reality of which the former is the phenomenon, though Leibniz often speaks as if they were two separate kingdoms of reality. The phenomenal world is only the real world confused, or perhaps we ought rather to say, refracted, in passing through the medium of sense; but the refraction follows a regular law of change, transmuting the harmonious development of the inner life of the different self-evolving monads into the external connexion of phenomena which act and react on each other in space and time.

The continuous scale of Being.

Whence, then, comes that "confusion" in the inner life of the monad, by reason of which its representation of the universe falls short of reality and sinks to the phenomenal? In answer to this question Leibniz is obliged greatly to qualify his doctrine as to the self-determination of the monads. God alone, he declares, is *actus purus*, but into the original constitution of every other monad he has introduced a passive element, a *prima materia*, a limit: and its absolute spontaneity, therefore, does not mean that it is unlimited, but that it is limited only by the negative element of its own nature. Now as

[1] *Monadologie*, 79.

the activity of the monad is representative or perceptive, this limit takes the form of a certain confusion in its perceptions. The whole world is present to each monad, but present always with more or less confusion or complexity, owing to the passivity or negation which belongs to them as finite. With this is connected the Leibnizian view of the universe as a graduated scale of being. All monads are perceptive beings, distinguished from each other by the degree of clearness of their perceptions; and the chain of life extends downwards without a break from God, who apprehends all things in the clearness of pure thought through finite spirits like men, who apprehend the world partly in the light of thought and partly in the confusion of sense, to animals which have only sense perception, and from these again down to monads whose perceptions are too confused even for sense. But perceptions there must still be wherever there is existence: for otherwise there would be no internal determination of the monad, no ideal centre or self to which its life could be referred. The world is thus through and through organic: and, as we have already seen, inorganic matter exists only in the confused ideas of sense.

Sense and thought in man.

Man, then, stands midway in the scale of being, having not only perception with its "confused" apprehension of things in their phenomenal appearance in time and space, but thought or apperception, which enables him to grasp their real nature as they are in themselves. What, then, is the relation between those two ways of knowing? The answer which seems most naturally to follow from the principles of Leibniz is that, as each monad represents the universe, a clear consciousness of itself would enable any monad to see all things in their true nature. Hence, a perfect intelligence would be ruled in all its consciousness by the law of identity and all things would be revealed to it through pure apperception, *i.e.*, through the analytic consciousness of itself. That it is not so with us but that we are conscious of objects as external to us and to each other in space, and that we are obliged to argue from the one to the other according to the law of sufficient reason (or causality) is due to the infinite complexity and confusion in which they are given to us as phenomena

through sense. Still the difference of sensation and thought is merely a difference of degree and not of kind. Sensation is but confused thought, and thought but distinct sensation. And there would seem to be no reason why our knowledge should not be raised from confusion to distinctness and so from the phenomenal to the real by the continued progress of analysis, or why at least we should not be continually approximating to the ideal of a determination of things in pure apperception according to the law of identity and without any aid from the principle of sufficient reason. Yet we find that, wherever Leibniz passes to a more exact consideration of the nature of the two ways of knowing, he treats the distinction between perception and apperception as one of kind and not of degree. The opposition between contingent and necessary truth, between truth of fact and truth of reason, is for him not fluctuating, but fixed and unchangeable.[1] The latter can, he thinks, be carried back by analysis to self-evident principles and indeed to identical propositions, while the former is entirely incapable of being so analysed. "I use," he declares, "two principles in demonstration: one of them is the principle that whatever contains a contradiction is false; the other is the principle that for every truth which is not an identical proposition, a reason can be given. In other words, the notion of the predicate is always explicitly or implicitly contained in the notion of the subject, and this is the case not less in contingent than in necessary truth. The distinction between contingent and necessary truth very closely resembles the distinction between commensurable and incommensurable numbers. Just as we can always find a common measure

[1] This view is developed by Leibniz, especially in the *Nouveaux Essais*, where, in answer to Locke, he draws a wide distinction between the intelligence of man and that of the animals. Apperception, it is there asserted, involves that apprehension of universal and necessary truths which gives rise to science, while the animals, being confined to mere perception, are necessarily "pure empirics." It is only another way of stating the same idea when it is said that the other monads represent or express rather the world than God, but that spirit-monads represent or express rather God than the world. Leibniz, however, goes even beyond this and practically adopts the view of Malebranche when he says that the thinking monad has one immediate external object, viz., God. (Erdmann's *Leibniz*, 222.)

for commensurable numbers, so we can always demonstrate necessary truth, *i.e.*, we can always carry them back to identical propositions. On the other hand, just as the analysis of a ratio of incommensurables produces an infinite series, so contingent truths require an infinite analysis which God only can complete. Wherefore it is by him alone that they are known certainly and *a priori*: for though a reason can always be found for the state that succeeds in the state immediately before it, yet this reason requires another reason, and so on *ad infinitum*. And this *processus ad infinitum* takes in our knowledge the place of a sufficient reason, which can only be found outside the series in God, on whom all its parts, prior and posterior, depend, far more than they depend on each other. For, when a truth is incapable of final analysis, and cannot be demonstrated from its own reasons, but derives its final reason and certitude from the divine mind alone, it is not necessary. Such are all those I call truths of fact, and this is the root of their contingency which I doubt whether any one hitherto has explained." [1]

Is sufficient reason identity or final cause?

On this view it is obvious that the principle of sufficient reason would merge in the higher principle of identity, if only the reason were *really sufficient*: but the limitation of human intelligence is just that such a perfect analysis is impossible to it. Thus, though the distinction is really one of degree, it remains one of kind for us: and this is why we need two separate principles of knowledge. Leibniz, however, gives another view of the principle of sufficient reason which identifies it with the law not of efficient, but of final, causation and makes it the higher principle to which the principle of identity is subordinated. According to this view, a distinction must be drawn between metaphysical and moral necessity, *i.e.*, between the necessity of that which we cannot think otherwise and the necessity of that which we can think otherwise but which must be as it is, because it is for the best,—must be because it ought to be. The former necessity, which depends on the principle of identity, fixes the bounds of possibility: even the power of God cannot give existence to that which is self-contradictory. The latter necessity,

[1] Erdmann's *Leibniz*, 83.

which depends upon the law of sufficient reason, determines the content of reality: it is the necessity by which God's goodness makes him create "the best of all possible worlds," or, as it is more definitely expressed, the world in which there is the highest sum of '*compossible*' existence, *i.e.*, of realities that can exist together in one world. But what is the highest sum of all compossible existence? To Descartes and Spinoza this question could present no difficulty; for they both accepted the principle that the absolute reality was the unity of all affirmations to the exclusion of all negations. And on that principle there could be no possible discord between positive realities, and all things that were possible would be 'compossible.' Thus no room would be left for the distinction between metaphysical and moral necessity, between that which is because it is, and that which is because it is for the best. But as we saw, the necessary result of this way of thinking was a Pantheism, for which all distinction and limitation, all finite being, disappeared in the one absolute substance,—a system which could not but be rejected by Leibniz, the keynote of whose speculation is individuality and self-determination. Hence the idea to which Leibniz holds, though by no means in a clear and consequent way, is that the absolute Being is not a mere *ens realissimum* or unity of affirmative predicates, but a self-determining monad, who reveals himself in a world of monads, each of which has its own self-determined individuality, distinct and independent of that of all the others, while yet all are held together in the pre-established harmony of one world. In this world there are no "indiscernibles," no monads absolutely like each other: yet each is a microcosm in which the whole is represented. But the *principium melioris* or principle of sufficient reason, on this view of it, is not merely different from the principle of identity but directly opposed to it. For while the latter is an analytic principle which, if it were taken as absolute, would force us to seek for identity under every appearance of difference, the former is a principle of synthesis which involves that there is no identity which does not manifest itself in real differences. Leibniz, however, as he escaped the opposition between true

individuality and the universal relativity of the monad by making the one real and the other ideal, so he evades the opposition between the *principium melioris* and the principle of identity by making the latter a principle of possibility, and the former a principle of reality. And he hides from himself the inconsistency of having two first principles by the conception of a God who selects among possibilities those which are capable of combination, and which, when combined, will produce the greatest sum of reality. "It is yet unknown to me," he declares, "what is the reason of the incompossibility of different things or how it is that the natures of different things can be opposed to each other, seeing that all purely positive terms seem to be compatible." This assertion shows how uncertain is Leibniz's hold of the principles by which he is guided. For the last clause can only mean that he has no intelligible reason to give for departing from the principles of Spinoza, though he is aware that they are fatal to his characteristic doctrine of the independent reality of individual substances. With similar inconsistency he accepts the definition of God as the union of all affirmative predicates, not seeing apparently any more than Spinoza that such a definition is inconsistent with the idea of God as a *causa sui* or self-determining monad, and still more inconsistent with the idea that he is a self-revealing subject or good being, who, because he is good, must create other beings like himself. Again, while he admits the necessity of reciprocal negation, limitation and conflict in the world of finite monads, he yet does not seem to regard this merely as an accidental evil, bound up with the attainment of the highest good. Hence the highest good is for him not a positive good which is realised in and through negation and evil, but an abstract sum of reality which can be attained in spite of such negation. Finally, as might be expected, in his conception of the relation of God as the highest monad to the other monads, he is poised between two inconsistent alternatives: for whenever he is in earnest with the reality of the individual substances, God is reduced to another word for the harmony that prevails between them; and whenever he is in earnest with the reality of God, all the other monads

shrink into momentary expressions or "modes" of his unity. If "God alone is the primitive unity or simple originative substance, of which all created or derivative monads are the productions, born, as it were, of the continual fulgurations of divinity from moment to moment,"[1] the independence of the monads shrinks within very narrow limits. If, on the other hand, "every spirit" (and therefore in a sense every monad) "is like a separate world, sufficient for itself, independent of any other creature, enveloping the infinite, expressing the universe, and as durable, as self-sufficient and as absolute as the universe itself,"[2] where is there room for God?

Summary view of the philosophy of Leibniz.

It may now appear what is the weakness and what is the strength of the philosophy of Leibniz. Its strength lies in this that, while he introduced into philosophy the principle of individuality, which was characteristic of the following century, he yet keeps hold of the principle of universality which was characteristic of the previous age. His weakness lies in this, that he achieved no real synthesis between the two elements which he thus brought together. He puts side by side the *real* individuality of the monad and its *ideal* relativity to the universe; the absolute independence of each substance and the immediate relation of all substances to God; the analytic principle of identity and the synthetic principle of sufficient reason; the idea of God as the *ens realissimum,* who absorbs all positive existence into himself and the idea of Him as the self-revealing spirit, whose nature it is to create other monads different from himself and from each other and through their difference to realise the highest unity. Nor does he ever attain anything more than an external "harmony" between these different sides of his philosophy.

A system whose parts were joined together with such untempered mortar could not but yield to the dissolving force of time, and it was natural that, in the first instance at least, the inconsistency should be remedied not by seeking for a deeper principle of reconciliation between the different elements, but by dropping those of them which were least in harmony with the spirit of the age. Wolff "swept and garnished" the Leibnizian philosophy.

[1] Erdmann's *Leibniz*, 708. [2] *Id.*, 128.

Without changing the outer framework of the system, he sought to make it self-consistent, and in doing so he gradually eliminated all those speculative elements which saved it from the emptiness of a formal Individualism. At the end of the process it was found that the kernel had been removed and only the husk left for show, and thus the hour of triumph of the Wolffian philosophy was the hour of its fall.

Wolff's consistent Individualism destroys the Leibnizian Philosophy.

Wolff's first step was to discard the synthetic principles which Leibniz had introduced, by reducing the law of sufficient reason to the law of identity; and the way in which he reached this result shows that he took that law in the strict Spinozistic sense. He begins with two definitions: *Nihilum est cui nulla respondet notio* and *aliquid est cui notio aliqua respondet.* Thus "something" and "nothing" are contradictories between which there is no middle term. But no repetition of nothings can make them equivalent to something, or, in other words, *ex nihilo nihil fit:* which is simply the converse of the proposition that there is a positive reason for everything. It is evident that this argument rests on that absolute separation of affirmation and negation of which the necessary result was seen in Spinozism. For, strictly speaking, it involves not only that nothing can come of nothing, but that there is no "coming" or development at all, either in thought or reality. Hence there is no meaning left for the distinction of reason and consequent, which Wolff suddenly produces upon us as by a stroke of logical sleight of hand. Wolff's definition of "nothing," *id cui nulla respondet notio,* would be sufficient to refute him: for it is a definition of the indefinable: and as the definition of "something" has significance only by contrast therewith, it too becomes unmeaning. Thus Wolff's argument implicitly involves the principle that "all determination is negation," the immediate corollary of which is that positive reality can only be found in an absolutely undetermined being or substance. But while Wolff thus goes back to the formal principle of Spinoza, he is as far as possible from coinciding with Spinoza's tendency to dissolve all finite being in the universality of substance. On the contrary

the presupposition, upon which he always rests as an absolute basis of certitude, is the pure individuality of all real being; and he rejects altogether the qualifying idea by which Leibniz saved himself from Atomism, that each monad is *representative* of the universe. The only remnant of this which Wolff retains is the idea that the soul is in pre-established harmony with the body, so as to apprehend its affections and the world through them, and it is only in this sense that he can still call the soul a *vis repraesentativa universi.* Even this part of the Leibnizian theory he accepts with some hesitation, as being the most probable account of the relation of two substances so heterogeneous as soul and body, between which it seems impossible to conceive of any direct relation. In like manner he retains the Leibnizian idea of God, as an external power who combines into one universe the individual substances which in themselves have no necessary or essential relation to each other. In truth, without these two assumptions the unity of things with each other and with the mind that knows them must have altogether disappeared in the Wolffian philosophy. For in it the harmony of soul and body is the one link between consciousness and the world—the one principle which saves the individual from being imprisoned in his own self-consciousness. And the idea of a God, who keeps together the *disjecta membra* of the world and fits them to each other by an external process of arrangement, is a necessary expedient to correct the isolation to which things were reduced by the individualistic principle. For, if the world is merely a collection of independent things, it is obvious that its parts must be held together by a foreign hand, and if the mind and its object are essentially disparate, their relation can only be an externally produced harmony. With Leibniz, indeed, these consequences of individualism were partly concealed. For, with him the ideal harmony of things was always on the point of passing into their real unity as organic elements of one world, and the principle of identity, by which each thing was referred to itself, had beside it the principle of sufficient reason, by which it was related to all other things. But, as with Wolff the whole process of reason reduces itself to analysis,

there is for him no possibility of bringing into essential relations any elements of thought or reality which have once been separated or even distinguished. It is only in so far as he derives from experience, or from the common consciousness, the idea of a connexion of things with each other or with thought that he has anything left to analyse; and if his analysis does not end in absolutely destroying any such connexion, it is an unexplained mercy, or a mercy which can be explained only by the imperfect way in which Wolff realised what he was doing. As it is, all connexion or unity is reduced by him to an external composition. All, therefore, that was necessary, in order to bring down the whole edifice of the Wolffian system like a house of cards, was that scepticism should be directed against the principle of connexion which it still retained; or in other words, that it should be pointed out that on Wolff's principles there was no rational ground for any belief in the unity of objects with each other or with the knowing subject.

On Wolff's principles the constitutive power of reason must be denied.

What has just been said may be illustrated from another point of view by a short regress. So soon as the principle of identity ceases to be taken in the Spinozistic sense as the negation of all real differences; so soon, in short, as it ceases to be understood as a principle of analysis, which can only be used to exhibit more definitely the different elements contained in any given subject of predication, it becomes obvious that no process of thought founded upon it can enable us to go beyond the data with which we start. *Either*, therefore, we must suppose that there is some other principle of thought by which its defects are supplied, some principle of synthesis, like Leibniz's *principium melioris*, which may be brought to the aid of the principle of analysis; *or* we must suppose that all the connexions of things are given in experience, leaving to thought no task except to analyse them: *or*, lastly, we must suppose that the synthetic unity of knowledge arises in some way out of the combination of the manifold data of sense passively received with an activity of thought. Now the third of these solutions of the difficulty we may leave out of account, as it was not conceived, or at least clearly worked out, by any one before

Kant. The first solution was formally rejected by Wolff, when he reduced the principle of sufficient reason to the principle of identity. Hence it would seem inevitable that he should have accepted the second alternative. And this he practically did, though with no distinct consciousness of what he was doing. It is true that he draws a wide distinction between the *a priori* and the *a posteriori,* the pure and the empirical, parts of each department of philosophy, between rational and empirical Psychology, rational and empirical Cosmology, etc. But this distinction has no meaning in a system in which reason is reduced to the function of analysis, and is supposed to be unable to establish any relation between ideas except that they contain, or do not contain, each other. In fact, Wolff is obliged frequently to appeal to experience, not only for all his data, but also and above all for the connective principles by which these data are related to each other: and even where the appeal is not directly made, we can easily see that such principles are tacitly borrowed from the ordinary consciousness of his time. Now, so soon as the critics of the Wolffian system began to detect this secret, the effect was to discredit reason as a *source* of knowledge and to reduce it to a merely formal activity. And as reason was discredited, its place could be taken only by experience. The result of the Wolffian method was, therefore, the very opposite of that which its author proposed. He had been possessed with a noble confidence in the power of intelligence to clear up all darkness and to penetrate all the mysteries of things; but in the end he seemed only to prove the barrenness of thought in itself, and the necessity that everything should be given to it from without. He sought to show that the world was an intelligible system, in which the mind could find the counterpart of its own transparent unity; but, if he proved anything, it was that the whole nature of the world must be taken as an unintelligible fact, and that the bond of union between its elements is something upon which thought can throw no light, something which must be accepted by a faith which is either above, or below, reason. Wolff thus played into the hands of those to whom he was most opposed, the Empiricists and the Pietists. For

each of these proposed to supply the evidence of immediate experience for certain of the principles which Wolff was obliged to assume, the former for the principles supplied in his physical, and the latter for the principles implied in his metaphysical, philosophy. On the other hand, if reason were to reject such assistance, if it were to refuse to accept the external aid of faith and experience, what must be the result? The analytic philosophy which separated object from object, and subject from object, must end in depriving all these elements of their meaning. For an individual thing, separated from all its relations, becomes a "thing in itself," of which nothing can be said; and a thinking subject which has no consciousness of any object but itself, is necessarily limited to what Kant calls the "analytic unity of apperception," *i.e.* the mere tautological "I am I" of self-consciousness. In short, the abstract individual, separated from all other individuals, is as empty and indeterminate as the abstract universal, and for the same reason. For a philosophy which excludes all synthetic principles of reason is forced in the end either to accept the truth as an unintelligible datum from without, or to reduce it to a blank form without any content or matter.

Criticism of Wolff's pre-established harmony of body and soul

It cannot be said that these inferences were distinctly drawn either by those who supported, or by those who opposed, the Wolffian philosophy. But the logical effect of a system is often felt or anticipated long before it is explicitly stated. In this case it showed itself in the growing influence of its rival, the empirical philosophy, in the development of several forms of Eclecticism, and finally in the gradual transformation of the Wolffian philosophy itself at the hands of its adherents. This transformation began, as might be expected, by a criticism of the principles of connexion between individual substances, which were still retained from Leibniz in the Wolffian philosophy. For Wolff, insisting upon the conception of the monads as isolated individuals and as, therefore, in all the changes of their states independent of any action from without, had rejected Leibniz's qualifying idea that these monads perceive or represent the world. Perception and representation were for him the

attributes of the spirit-monad only, and even it was regarded as, in the first instance, representative only of the body attached to it. But with this change of the Leibnizian doctrine, the inner life of those monads which were not souls became a blank, and the spirit-monad was so widely separated from all the others that its perception of them became something anomalous and almost miraculous. It was this that caused Wolff to be so hesitating in his assertion of the pre-established harmony between body and soul. His hesitation, however, only betrayed the weak place in his system, upon which all its opponents at once directed their attack. The crude form of the theory of an *influxus physicus, i.e.*, of a mere determination of the passive soul from without as by material impact, could easily be refuted by those who had been taught by Leibniz that there is no such passivity even in matter, but that every material element as such is a centre of force. But, on the other hand, the science of mechanics seemed to show that there is no force or determination which is purely internal and is not correlative with a determination from without; and the same principle seemed applicable *mutatis mutandis* to the relation of soul and body, in the sense that there is no consciousness of self which is not a reaction upon a stimulus from without. Baumgarten, who finally summed up the result of the controversy, preserved the Wolffian doctrine in name while sacrificing its substance, when he denied *real,* and admitted only *ideal,* influence of monads upon each other; defining a real influence, however, as one to which the object acted on contributes nothing, while an ideal influence is one in which the effect produced in one substance by the action of another involves an activity in the substance affected. According to this view it was still possible to assert that there are none but ideal relations between substances, in the sense that one substance cannot act upon another substance except to stimulate it to the activity that is characteristic of it; and that in particular a material substance can be stimulated only to motion and a thinking substance to thought. It is, however, obvious that by this interpretation the idea of the pure self-determination of substances, which Wolff had inherited from Leibniz

and had even exaggerated, was altogether surrendered.[1]

Knutzen's synthesis of Wolff and Newton.

It was Knutzen, the teacher of Kant, who took the foremost part in the controversy which led to this result—a result which really meant the surrender of the central principle of the Wolffio-Leibnizian philosophy, *i.e.*, the pure inward self-determination of the individual substance. Knutzen, however, does not seem to have reached his conclusions by simple reflexion upon that philosophy. He did not begin by recognising that a purely inward self-determination is empty or self-contradictory, and then proceed to argue that an individual substance cannot determine itself except in relation to another substance which acts upon it. Rather, his view was suggested by the study of Newton's *Principia*, and it was developed in the effort to combine Newton's ideas with the principles he had previously learnt from Leibniz and Wolff. At the same time, it was the inner necessity of this new idea,—the necessity for it arising from the development of the Wolffian philosophy itself,—which made the acceptance of it so rapid and irrevocable. With this synthesis of Knutzen began the process of organic combination between the hitherto separated and opposed streams of English and German thought, between the Empiricism of Locke and the Rationalism of Leibniz: a process which could not end till it had transformed the problem of philosophy by raising it to a point of view above that of either of these one-sided schools. A short sketch of the earlier period of the philosophical development of Kant will show us how he attained to this new point of view. An account of the later history of it will show how from it he gradually accomplished the consequent transformation of philosophy.

[1] Benno Erdmann (*Martin Knutzen und Seine Zeit*, ch. 4) has given the first clear account of this controversy and its result.

CHAPTER IV

THE PRE-CRITICAL PERIOD OF KANT'S MENTAL HISTORY

Kant's earliest writings. Attempts to reconcile Newton and Leibniz.

KANT, as we have seen, was educated during the period in which the Wolffian philosophy was in process of disintegration even at the hands of its own disciples, and he was the pupil of one who did much to hasten that process. Knutzen sought to correct Wolff by the aid of Newton; and in doing so he was led to give the *coup de grâce* to the theory of pre-established harmony, and to revive in a better form the theory of an *influxus physicus*. In the first period of Kant's career his thoughts ran in the same groove with those of his teacher; *i.e.*, he was still under the general influence of Wolffian Rationalism, attempting only to modify it in such a way as to make room for the mechanical conception of nature initiated by Newton. Thus in his youthful essay on *vis viva*, he not only rejects the Cartesian idea of matter as a passive substance which is determined purely from without, in favour of the Leibnizian idea that it is made up of elements which are active centres of force, but he goes on to turn this conception against Leibniz himself, who had supposed that such force belongs only to moving bodies. He contends, on the contrary, that it must be conceived as itself a source of movement. Connected with this is the idea that the individual substances are possessed of attractive, and not only, as Leibniz had maintained, of repulsive, force in relation to each other. This idea Kant, of course, received from Newton, of whom he was an enthusiastic student. Nor did he content himself with repeating Newton's ideas, he also tried to develop them, and that in two directions. On the one hand, in

the *Natural History and Theory of the Heavens,* he tried to show that the mechanical principles which Newton had used to explain the solar system would account also for its genesis; *i.e.,* they explain how matter diffused through space would, by the reciprocal attraction and repulsion of its particles, be turned into a system of planetary bodies revolving round a central orb in the way exemplified in the solar system. On the other hand, in his *Monadologia Physica,* he attempted by a regress from the Newtonian theory to determine the ultimate constitution of matter. The idea of *actio in distans,* which was rejected by Leibniz and which even Newton accepted only as a provisional hypothesis, was asserted by Kant as a necessary part of the dynamic idea of matter. Kant argued that if, according to the Leibnizian view, the primary substances are points of force, they must be simple unextended substances which, taken individually, cannot be conceived as occupying space at all. But they may occupy it in relation to each other, in so far as each monad excludes or repels the others (with a force which as it acts in every direction, must be supposed to vary inversely as the cube of the distance between them). On the other hand, if this were the only force which the monads possessed, they could not constitute matter as we know it; for under its action they would isolate themselves from each other and dissolve all continuity: they could never retain any definite volume or mass. We must, therefore, suppose that the monads are held together by an opposite force, which, as it depends upon the spherical superficies over which the action is extended, varies inversely as the square of the distance.

Kant begins with the individual, but proceeds to negative, and positive, relativity.

In this theory it is to be observed that Kant, like Leibniz, begins with the individuality of things as separate substances or monads existing in simple self-identity; he then goes on to conceive them as having repulsive force, *i.e.,* as negatively related to each other, each, so to speak, asserting itself and negating the others: and finally he shows that this negative relation implies a positive relation, an attractive force which they exercise upon each other; for otherwise they could not be kept in relation so as even to repel each other. Both forces are thus necessary to the occupation of space. The external way in which these

different elements are added to each other exhibits clearly the process of self-correction by which Kant reaches his final conception. And, as we shall have many occasions of observing, it is characteristic of Kant that, while he qualifies the individual self-identity of the monad, first by the conception of its negative, and then of its positive relativity, the result he thus reaches does not lead him to go back upon his starting point, or to set aside the absolute individuality of the monad with which he began.

His first Metaphysical treatise. Reassertion of the principle of sufficient reason.

Kant's *Dilucidatio Nova*, published in 1755, in the same year with the *Monadologia Physica*, enables us to see more exactly the degree to which he still retained his hold upon the general principles of the system of Wolff. In that treatise he starts, like Wolff, with the principles of identity and contradiction as the highest principles of truth. But he immediately goes on to treat as a principle at least partially independent the law of sufficient, or rather, as he prefers to call it, of determinant reason. Determinant reason, he adds, appears in two different forms: as *ratio antecedenter determinans*, or as *ratio consequenter determinans*. The latter is a mere *ratio cognoscendi*, which enables us to connect a given predicate with the subject, but does not tell us why it is so connected in reality. The former is a *ratio essendi vel fiendi,* which not only explains the connexion but is the cause of its existence (*non solum explanat, sed efficit*). Thus, to take Kant's example, the eclipses of Jupiter's satellites may be the means of our discovering the rate of the propagation of light, but no one would say that these eclipses are the real reason of the rate being such as it is. On the contrary, the phenomena of these eclipses could be what they are only on the presupposition of the actual constitution of light. But if we were to adopt the Cartesian theory, that the reason of the propagation of light lies in the definite elasticity of the globes of ether, and if we were able on this basis to calculate the rate of its propagation, we should be tracing it to its real reason or *ratio antecedenter determinans*.[1]

The Ideal and the Real ground.

From this it would appear that the *ratio consequenter determinans* is the fact or datum by analysing which we

[1] R. I. 11; H. I. 373.

discover a principle; whereas the *ratio antecedenter determinans* is the principle in which we find the reason why the datum or fact is what it is. Under the head of *ratio antecedenter determinans,* however, Kant brings both the *ratio veritatis* and *ratio existentiae,* the ideal and the real ground, pointing out that in the case of the former the ground may be *either* that the predicate is involved directly in the nature of the subject, *or* that it is connected with it by some *tertium quid.* We may, therefore, say that no true proposition lacks a *ratio antecedenter determinans.* It is somewhat different in the case of the *ratio existentiae,* for we cannot say that everything has a real reason or cause. We can only say that all contingent existence has a real reason, but that ultimately the reason for all such existence must be found in that necessary being which has no *ratio antecedenter determinans.* This distinction of the real and ideal reason, which Kant adopts from Crusius, leads him decidedly to reject the idea that existence can ever be included as an element in the conception of an object. If we speak, in the language of Wolff, of the essences of things as absolutely necessary, all that we can mean is not that the things in question necessarily exist, but that, given their existence, they necessarily have certain predicates. "The essence of a triangle, which consists in the construction of three straight lines in a certain way, is not *per se* necessary. For what sane person would argue that the three sides must be always conceived as meeting in that way? All that is necessary by the principle of identity is that, *if* you think of a triangle, you are bound to think of the sides as so united."[1] This consideration is fatal, as Crusius had shown, to the ontological argument for the being of God in its usual form. For all it proves is that, if we include existence in our idea of God, we are bound to determine him as existing. In order to make it a valid argument, we are obliged, therefore, to give it a new form. We cannot prove God's existence from the essence or conception of Him, as from a *ratio antecedenter determinans,* but we may show that His existence is presupposed in the conception of Himself, and indeed in the conception

[1] R. I. 15; H. I. 376.

of anything. *Datur ens cujus existentia praevertit ipsam et ipsius et omnium rerum possibilitatem. Vocatur Deus.*[1] The proof of this is that the question of possibility can only arise when we have certain determinate data which we can compare, and as to which we can ask whether it is, or is not, possible to combine them without contradiction. But this means that we take the data as real in considering the possibility of their combination. Hence, in considering the question of possibility, we are always dealing with the modified or determinate forms of a presupposed primary reality, to which we are necessarily carried back as the "material of all possibility," the underlying unity of which all conceivable existence is some special limitation. This, therefore, is the *ratio antecedenter determinans* of all existence, for which it is absurd to seek a reason. On the other hand, everything but this primary reality is contingent and determined to exist by a reason other than its own nature. Hence Kant distinguishes the *ratio veritatis* and the *ratio actualitatis s. existentiae* in the following way. "In the former the question is only as to the assertion of a predicate, which we are enabled to assert by reason of its identity with the subject regarded either in itself or in its connexion with other things." In this case, therefore, the *ratio antecedenter determinans* reduces itself to the principle of identity, and "all we do is to throw light on a connexion of subject and predicate which is already given. But in the latter case we are examining not merely *whether* the predicate belongs to the subject or not, but *why* it does so. If the opposite predicate be excluded by the absolute position of the subject, we have in the subject a being whose existence is necessary absolutely and *per se*. But if not, then there must be something else which, by positively determining the subject so and not otherwise, excludes the existence of the opposite."[2] A *ratio antecedenter determinans* or real ground is, therefore, required only in the case of the existence of finite substances and their states. Yet of the *general* reason for the existence of finite substances Kant gives no account and could give none; for the God he has proved is merely the indeterminate substance of

Kant does not give a real ground for the finite in general but only for particular phenomena.

[1] R. I. 14; H. I. 376. [2] R. I. 19; H. I. 380.

Spinoza, which contains in itself no reason for the existence of anything but itself. The self-limitation by which God is supposed to create finite things is, therefore, a conception for which Kant provides no justification (any more than Spinoza could explain the existence of attributes and modes).[1] In place, therefore, of the inference which Kant actually draws, viz., that the "quantity of reality in the finite world cannot be naturally increased or diminished," it would have been more logical to infer that the absolute substance is without change or limit. When, however, the existence of finite substances has once been assumed, Kant is able to give a better account of the reasons or causes of their changing states. For, from the general principle of determinant reason, he derives two subordinate principles, which he calls the principle of succession and the principle of coexistence. The principle of succession is that "no change can occur in substances unless they are connected with others, in such a way that their reciprocal dependence determines a mutual change of state." This is proved by the consideration that a substance existing by itself can only have internal states which are determined for it by reasons that flow from its own nature. But this nature is, *ex hypothesi,* simple and incapable of being changed by itself. It follows that all reasons or causes of change must come from without, from other substances with which it is brought into connexion. If therefore a *commercium* of substances is established, it cannot be accounted for by their bare existence as individual substances. On the contrary such individuality would rather imply that each of them should have an existence which is completely intelligible apart from the others. Hence we have the second 'principle of coexistence,' that "finite substances by their mere coexistence are not determined as having any relation to each other, and are held together in no mutual *commercium* except so far as they are maintained in it by a common principle, *i.e.,* by the divine intelligence." "The *schema* of the divine intelligence in which all creatures take their origin is a continuous act commonly called preservation: and if in that act there were any substances which were con-

Principle of succession.

Principle of coexistence.

[1] R. I. 31; H. I. 389.

ceived by God as solitary and without any relation between their determinations, no connexion or mutual reciprocity could ever arise between such substances; if, however, substances be conceived relatively in the divine intelligence, then, conformably to this idea, their determination will always thereafter have a mutual reference during all the continuance of their existence, *i.e.*, they will act and react, and each of them will have an external state, which could not be accounted for by their existence alone apart from the uniting principle."[1] Kant goes on to say that space and position are names for relations of substances which have mutual *commercium* through their common dependence on God, relations which would otherwise have no existence. Hence we may gather that the Newtonian attraction, or universal gravitation of matter, is "probably the effect of the same nexus of substances whereby they determine space." In any case this view enables us to mediate between the theories of pre-established harmony and occasional causes on one side, and the crude idea of an *influxus physicus* on the other; for while, according to the view above stated, we maintain that there is a real action and reaction of substances, we yet hold that that action and reaction cannot be explained by the nature of individual substances as such, apart from their dependence upon the one absolute principle, which at once gives them existence and binds them together in one world.

Compromise between Individualism and Theistic unity.

In the treatise just analysed we see the compromise at which Kant had arrived at the beginning of his philosophical career. It is not accurate to say that in it Kant shows himself a thoroughgoing supporter of the dogmatic Rationalism of Wolff, any more than to say that he has distinctly broken away from it. There is as yet no trace of acquaintance with those ideas of Locke and Hume, which were afterwards to influence him so powerfully. But the study of Newton has introduced a new principle which is already transforming his philosophy from within. Thus Kant assumes as an axiomatic principle that the world is a collection of simple individual substances with a nature of their own which is determined purely from

[1] R. I. 41; H. I. 397.

within; but he immediately modifies his view by the conception that that which manifests itself in the phenomenal relations of the substances is not their inner nature but only their changing states which are determined by the action and reaction going on between them. Yet this external influence of the substances upon each other is asserted to be not merely accidental but due to the same creative act which gave them existence. Thus, in conformity with Leibnizian principles, there is a certain ideal priority given to the individuality of the substances as compared with their relativity; and even when that relativity is brought in, as in the *Monadologia Physica,* the repulsive force is treated as prior to the attractive, *i.e.,* the negative relation of substances to the positive.[1] But as in that treatise it is argued that both forces are necessary to the constitution of matter, so here the unity of the monads as elements in the same world is supposed to be communicated to them along with their existence as individuals.[2] Indeed, although Kant speaks of an inner state of the monads determined for them apart from their relations, he neither here nor in the *Monadologia Physica* makes any attempt to define it. At a later period, in the *Critique of Pure Reason,* we find him saying that, if monads have an inner state of being, it must be that which Leibniz attributed to them, a *status representativus*: for thought or consciousness is the only conceivable inner state which a substance can have.[3] Here, however, Kant says nothing of the Leibnizian theory, and the inner state or independent being of the monads apart from all external relations remains an empty abstraction, which merely indicates Kant's individualistic starting point. But this abstraction leads to a further result. Just because Kant conceives the individuality or independence of the substances and their relativity or dependence upon each other as separate moments, which have no necessary relation

[1] It is noticeable that this priority of the repulsive force maintains itself in Kant's thought to the last, *i.e.*, in the *Metaphysical Rudiments of Physics.*

[2] R. I. 44; H. I. 399. *Est realis substantiarum in se invicem facta actio, seu commercium per causas vero efficientes, quoniam idem quod existentiam rerum stabilit principium, ipsas huic legi alligatas exhibet.*

[3] A. 274; B. 330.

to each other, he needs a *tertium quid* to mediate between them. The *deus ex machina* has to be introduced, since otherwise it would be impossible to conceive of the individual things or monads as, notwithstanding their individuality, acting upon each other, or even as contained in one space: for as contained in space there already is a relation between them which is not implied in their mere existence. God is needed to account for the unity of the world. "Since therefore," Kant argues, "the mere existence of substances is plainly insufficient to account for their mutual connexion and reciprocal influence, and an external nexus of things independent implies a common principle through which their existence is determined with relation to each other: and since, without such a common principle, no general bond of union can be conceived, we have here a most evident proof of the existence of God, and, indeed, of the existence of one God—a proof which is far more convincing than the common argument *ex contingentia mundi*."[1]

Imperfect development of the idea of the relativity of substances.

In this theory there is a curious inversion of the point of view maintained by Leibniz and Wolff, though the lingering influence of their doctrines is still traceable. Leibniz had argued that, because substances are individual there can be no real relations between them. Kant argues that, unless the substances be in real relation to each other, this simple individuality would make their changing states incomprehensible. At the same time, their relations are explained not as necessary properties but as separable accidents of them, and God has to take the place of a synthetic principle to bind together substances which are not necessarily connected. Since, however, the relations of the substances are represented by Kant as real and not merely ideal, and since the substances can manifest their nature only in those relations, the opposition of their individuality to their relativity is on the point of disappearing, and with it of course must disappear the externality of the principle that unites them. For, if the difference of the substances be merely a *relative* difference, *i.e.*, a difference of elements which are nothing apart from their relations to each other, the binding principle cannot

[1] R. I. 42; H. I. 398.

be regarded as an external link of connexion, but must be taken simply as the unity which underlies the differences of the substances, and which manifests itself in their action and reaction upon each other.

Kant's recurrence to the Spinozistic idea of God.

Such a conception is not of course furnished to us by Kant, but he makes a step towards it when he treats God as not merely an external power who arranges the monads and binds them to each other, but as the real being who is presupposed in all possibility, *i.e.*, the positive or affirmative unity which is the basis or presupposition of all determination and distinction. For it is to be noticed that, while Kant rejects the ontological argument in the form in which it was stated by Wolff, he restores it in another form, *i.e.*, in the form which was characteristic of Descartes and Spinoza. We may not, he thinks, argue that the being whom we conceive as the *omnitudo realitatis* necessarily exists, on the ground that if he did not exist, existence, which is a species of reality, would be lacking to the idea of him; for in such an inference we make a leap from the ideal to the real. To such logic, it is sufficient to answer that " if all realities without exception are united in any being, that being must exist: but if they are only conceived as united, its existence will only be an existence for thought." [1] Thus it appears that that which exists for thought is only a possibility, and something more is required for actuality. But Kant immediately turns round and asserts that there is one actuality which is not something added to possibility or thought, but the presupposition of it. This is " the material of possibility," the positive being which we assume as the basis for further determination, and which we actually determine whenever we assert any one thing to the exclusion of another.

Importance of this change.

Is there any value in this alteration of the form of the ontological argument, or has Kant merely changed the foot upon which his dogmatism is standing? The answer is that it is one thing to argue from the finite determined as such to the infinite, and another thing to say that the finite cannot be conceived except through, and in relation to, the infinite. Or, to put it in another way, it is one

[1] R. I. 14; H. I. 375.

thing to say that from my thought I can argue to a reality which is supposed to be external to my thought and independent of it, and another thing to say that the distinction between my thought and reality cannot be made except by a consciousness which in a sense embraces both. Hence it was an obvious case of reasoning in a circle, when Wolff, who held that the inner life of the "thinking substance" was simply a consciousness of his own ideas, and that these ideas corresponded to objects only by the external arrangement of a pre-established harmony, attempted to prove from his own ideas the existence of the Being who made this arrangement. For how could the monad, which *ex hypothesi* is confined to itself, prove from its own ideas the existence of a Being who connects these ideas with external realities? If, however, the consciousness of our own ideas as such is possible only through the consciousness of objects which are not our ideas, then we shall have a right to say that the consciousness of self in distinction from the not-self presupposes a unity beyond that distinction. And this is the real meaning of Kant's assertion that the existence of God is presupposed in consciousness of self.

Logically it would have led to Spinozism.

So far, then, we may recognise that Kant's change of the form of the ontological argument has a real and important meaning. Unfortunately, however, Kant's way of working out the true idea of the priority of the unity of being and thought, of object and subject, to their difference is simply the old way of Descartes and Spinoza, which involves the negation of that difference and the dissolving of all finite being in the infinite. This is implied by Kant in the treatise we are examining, when he says that all limited existences are *ipso facto* contingent, and it is more directly expressed in his *Essay upon Optimism*, published four years afterwards. In that essay he adopts the argument of the Leibnizian *Theodicy*, that all positive reality is combined in God, and that a world of finite beings, if it was to exist at all, must have more or less negation mingled in each of its parts, and, therefore, must be vexed with conflict and evil. On this view the finite does, indeed, *imply* the infinite, but it has no ground for its existence *in* the infinite: in other words,

the affirmative is presupposed by the negative, but the negative does not in any sense flow from the affirmative. But, then, the principle " determination is negation " must be taken in the Spinozistic sense that the only real is the indeterminate: and the finite must be regarded as an illusory semblance.

Summary of the *Dilucidatio Nova.*

The result, then, of Kant's first treatise on metaphysic is to transform the Wolffian philosophy by the assertion of real relations between substances, which are therefore regarded not as purely self-determined monads but as individual objects in one world, the changing phenomena of which are determined by their reciprocal action and reaction upon each other. Further, this action and reaction is carried back to certain repulsive and attractive forces, which belong to the substances of which the world is composed and determine their relations to each other. Finally, each of these substances is taken as in itself individual and exclusive, but at the same time as presupposing an absolute or universal substance in relation to which their exclusive individuality disappears. Thus Kant revives the old dilemma of Leibniz, that it is impossible to be in earnest with the reality of the individual substances without denying their unity and the reality of the universal substance, or to be in earnest with the reality of the universal substance without reducing the individual to something illusory and unreal.

Kant's final rejection of the Wolffian philosophy.

The special problem which naturally became prominent in Kant's thought as he reflected upon this result was the problem of the connexion of thought and reality; and this problem itself opened up into two subordinate questions—the question whether, and how far, thought can go beyond itself to assert the reality of its object, and the question whether, and how far, the connexion of thought corresponds to, or differs from, the connexion of objects. Accordingly, it is with these questions that we find Kant engaged in a series of treatises published during the years 1762-3.[1] These are:—a short paper on *The False Subtilty of the four Syllogistic Figures*; a longer treatise on *The*

[1] It has been proved by Dr. Benno Erdmann that the four treatises were published in the order stated in the text. (*Reflexionen Kant's*, Introduction to vol. II. p. 17 *seq.*)

Sole Ground for a Demonstration of the Being of God; an essay, written for a prize offered by the Berlin Academy, *On the Evidence of the Principles of Natural Theology and Morals*; and finally, an *Attempt to Introduce the Conception of Negative Quantity into Philosophy*. This series of writings, to which may be added the *Dreams of a Ghost-Seer illustrated by the Dreams of Metaphysic*, published three years afterwards, mark a decided advance upon those we have already examined. They show that Kant had almost entirely shaken off the yoke of Wolffian philosophy, and the last mentioned of them might be regarded even as a kind of declaration of war against it. They prove also that he was gradually approximating to the point of view of English Empiricism as represented by Locke, if he did not fully accept it. Hence it has been proposed to call this period of Kant's development the epoch of Critical Empiricism, in distinction from the earlier period of Rationalistic Dogmatism. If, however, we have given a true account of the results which Kant had reached during that first period, no such marked line can be drawn between them. The despairing renunciation of Rationalism, which shows itself in the "Dreams," is only the final result of a course of investigation which is already begun in the *Dilucidatio Nova*; and the intervening treatises enable us to connect the latter with the former almost without a break.

The movement of thought purely analytic.

The essay on *The False Subtilty of the Syllogistic Figures* need not detain us long. It takes the first step towards a discussion of the opposition between thought and reality by pointing out the limits of the movement of thought, according to the idea of that movement which was accepted by the Wolffian school,—an idea, we may add, which was never questioned by Kant himself, at least as regards the movement of *pure* thought. All the syllogistic processes are, he argues, reducible to analysis, though this is somewhat concealed by the artificial complexity of the theory of the logical figures. The first figure is the only one which fully expresses all that it implies, the only one, therefore, which exhibits the process of thought in its simplicity; for the evidence of the other figures rests on the possibility of reducing them to the

first by the conversion of one or both of their premises. But this conversion should be regarded as a separate inference and not introduced to complicate the syllogistic forms. The sole principles of syllogism are these two:—*Nota notae est nota rei ipsius,* and *Repugnans notae repugnat rei ipsi*: and these are themselves only corollaries of the laws of identity and contradiction, which are the principles of affirmative and negative judgment respectively. Hence there is no ground for saying that reason, *i.e.*, the faculty of reasoning, is different from understanding, the faculty of judging. Syllogism is just the activity of thought whereby a judgment is made complete, as judgment is the activity of thought whereby a conception is made distinct. The higher faculty of knowledge, which is characteristic of man, may, therefore, be described comprehensively as a faculty of judging or making his ideas distinct. The animals have no distinct conceptions or, in other words, make no judgments, and in this lies their inferiority. It has, indeed, been contended that the ox has a clear idea of the door of its stall, and can, therefore, use that idea as a means of giving distinctness to its conception of the stall: just as a man selects a particular attribute of an object, and makes it the predicate of a judgment concerning that object. But this is not the case. For it is one thing to have before the mind a clear image of that which is the attribute or mark of an object, and it is quite another thing to recognise it as the mark of that object, *i.e.*, to separate the two ideas and refer them to each other, as in the judgment, "this door belongs to this stall." And the same may be said of distinction which has just been said of relation. It is one thing to distinguish objects, and it is quite another thing to know the distinction of objects. The latter is *logical* distinction and means the recognition that A is not B; *i.e.*, it implies a negative judgment. The former is merely *physical* distinction, and it implies only that the animal that makes it is moved to different acts by different ideas. "We shall, therefore, be able to determine what constitutes the distinction between rational and irrational beings, if we are able to determine what the secret power is which makes judgment possible to us. My present opinion is that this

power or capacity is nothing but the faculty of inner sense, *i.e.*, the faculty which enables us to make our own ideas the object of our thoughts." [1]

Hence the necessity of many indemonstrable principles.

It would seem as if Kant had already touched upon one of the main ideas used in his Transcendental Deduction of the Categories, when he recognised that the faculty of judgment is at the same time the faculty which enables us "to make our own ideas the objects of our thoughts," or to refer our thoughts to objects. But a passing suggestion is not a discovery: and though Kant speaks of the activity of judgment as that which turns a series of like, or unlike, presentations of sense into a knowledge of objects, it does not occur to him to suspect that there is anything more involved in that activity than mere analysis. On the other hand, he sees clearly that, *if* the operation of thought is merely analytic, it is absurd to suppose that by means of it we can develop all truth out of one fundamental principle. "Those philosophers, who proceed as if there were no fundamental truths which are beyond demonstration except one, are as far from the truth as those who are ready to assume indemonstrable principles without sufficient warrant. Human knowledge is full of indemonstrable judgments." But if this be the case, then the complex ideas expressed in such judgments must, it would seem, be given independently of the activity of thought.

Can existence be included in the conception of an object?

Having thus reduced the process of thought to analysis, Kant goes on to enforce the lesson that it is impossible by that process to bridge over the gulf between thought and reality. This is the leading idea of his next essay on the *Only Possible Basis for a Proof of the Being of God,* in which, however, he does not, except in one point afterwards to be mentioned, get much beyond the ideas of the *Dilucidatio Nova.* As in the latter treatise, he urges that the analysis of our ideas can never assure us of the reality of their objects. Being, or Existence, is no part of any conception, which may be extracted from it by analysis and used as its predicate. "Take any subject you please, say Julius Caesar. Gather out of the conception of him all his thinkable predicates, those of time

[1] R. I. 73; H. II. 68.

and place not excepted, and you will soon understand that, though you have given him all these attributes, you have still left it undetermined, whether he exists or not." "In the complete determination of the possibility of a thing, no predicate can be left out which it would have, if it existed." "Where in our ordinary manner of speech, existence appears as a predicate, we must understand it not as a predicate of the thing itself, but of the thought of the thing. When, *e.g.*, we say that the sea-unicorn (or narwhal) exists, but not the land-unicorn, this means only that the former is an empirical conception, a conception of a thing that actually exists. In order, therefore, to show the truth of such a proposition, we have not to examine what is contained in the conception of the subject (in which we could find only predicates of its possibility), but we have to inquire into the origin of the conception. The question, in short, is whether we have seen the narwhal, or heard about it from those who have seen it. If, then, we were studying perfect accuracy of language, it would be better for us to say—not, 'The sea-unicorn is an existent animal,' but, 'An existent marine animal has all the predicates which I unite in the conception of a unicorn.'"[1] Hence also, the Cartesian proof of the Being of God, which is based on the inclusion of being in the conception of God, must be rejected.

Being equivalent to *absolute position*.

Being is a simple idea, which we cannot explain by dissecting it into still simpler ideas; but we may help towards a clearer understanding of it by means of the closely related idea of *position*. When used as the copula, the verb of being implies the *relative position* or assertion of something, *i.e.*, the position or assertion of a predicate in relation to a subject. Nothing is herein asserted as to the reality of the subject itself, which may be entirely a creation of imagination. But when the same verb is used as a predicate, it means the *absolute position* of the thing, *i.e.*, its assertion simply in relation to itself. Or, to put it otherwise, Being does not supply a predicate for any subject, but rather a subject to which predicates may be attached. When, therefore, we ask for a proof of the being of God, we are not asking for a middle term by

[1] R. I. 171-2; H. II. 115-117.

means of which we may show that the predicate of being is attached to God as a subject, but we are asking for a proof that something existent has all the predicates which are gathered into the idea of God.

Kant's explanation of the opposition of reality and possibility.

From these considerations it follows that all the usual explanations of the idea of being or existence must be rejected as inadequate, or even positively misleading. The definition given by Wolff, that it is the "complement of possibility," is inadequate; for it does not tell us what is to be added to possibility in order to constitute reality. Baumgarten, one of Wolff's most eminent followers, explained that the possibility of a thing was its logical essence or definition, with all the properties deducible therefrom: while the "complement" necessary for reality consisted of all the accidental predicates which come to be added to it through its connexion with other things in the world. But this is erroneous, for we may determine all the predicates of an object, whether necessary or accidental, without passing beyond its possibility. Nay, we may even say that, in order to be possible, an object must be completely and individually determined; *e.g.*, every possible man must be of a certain age, stature, figure, etc., and a man in whom any of these points are undetermined is impossible. Equally erroneous is the view of Crusius, that the determinations of time and place make the difference between possibility and reality. For, not to mention that this would involve the questionable principle that all that exists is limited by conditions of time and space, it is obvious that we can think of possible, as well as of actual, time and place. The true distinction of the real from the possible is found, not in the matter or content of our conceptions, but in the way in which they have been formed. In the case of all things but God, Kant in this essay maintains that the real is that which is given in experience and the possible is that which is not so given but merely thought. In the case of God, on the other hand, he repeats and illustrates at great length the same proof which we have already found in the *Dilucidatio Nova,* that God is the ultimate reality implied in all possibility. The only new point is the contrast which he draws between the *real* ground of all possibility, and the

formal or logical ground of it which is found in the principles of identity and contradiction.

Criticism of that explanation.

The assertion that reality or existence is not a true predicate, and that a possible object may have all the attributes of a real one without being real, is one that will meet us again in the *Critique of Pure Reason*. It raises the whole question of the relation of thought and reality, and of the nature of the opposition between them. Here it is only necessary to point out that when Kant interprets existence by "position," he admits, though without seeing the effect of his admission, that existence must mean existence *for a self*, or as posited by a self. For if this be admitted, the possible and the actual cannot be absolutely opposed, as that which is posited by thought to that which is given independently of its activity. And as the position of an object for a self can only mean the determination of it in relation to the other objects, which constitute the one objective world that exists for that self, so absolute position cannot be regarded as essentially different from relative position. It is the lingering associations of the individualistic point of view with which he started which makes Kant separate so absolutely between what the thing *is* and what it *is for us*, and again between what it *is in itself* and what it *is in relation to other things*. And the same almost ineradicable influence of his original point of view also leads him to suppose the possibility of a complete, analytic determination of the conception of a thing, which yet leaves it open to us to consider whether or not it exists; and to forget that every step in such determination is the assertion of a connexion of the thing with other things in the one intelligible world. The complete explanation of the possibility of a thing is, therefore, the same thing with the proof of its reality. The possible which can be opposed to the real is simply that which is determined for us only by a few relations, and which for that reason remains hypothetical, or merely possible. Hence, if our whole present consciousness of the world may be regarded as in a sense ideal or merely possible, it is only in so far as we recognise that that consciousness is in process of development and not because, simply as ideal, it is not real. So much it is necessary to say at

present, though the full discussion of the subject must be reserved till we come to deal with the *Critique of Pure Reason,* in which the same opposition appears in a modified form.

Kant thinks of God as the unity of reality and possibility, Being and Thought.

It has already been pointed out in relation to the *Dilucidatio Nova* that Kant himself was not altogether blind to the truth which is the necessary complement of his dualistic view of the relation of thought to being. Such a complementary idea appears, both there and again in this treatise, in Kant's version of the argument for the Being of God. For when Kant argues that there is an actuality implied in all possibility, a consciousness of a primary reality implied in the conception of anything as possible, he is putting a true thought into a somewhat obscure and inaccurate form. We cannot oppose the ideal to the real, that which is *for us* to that which is *in itself,* unless we assume that that which is in itself is also for us. We cannot be conscious of our ideas *as* our own in opposition to objects, except on the presupposition of an idea which is also objective. All such distinction supposes a relation of the elements opposed and therefore a unity beyond the distinction. In this sense, therefore, it is no mere "dogmatic slumber" that makes Kant revive the ontological argument. Unfortunately, however, in reviving it, he does not yet improve upon that form which it had with Descartes and Spinoza. Like them, he reaches the unity beyond difference merely by abstraction from the differences, and therefore he conceives that unity merely as a "material of possibility," *i.e.,* an affirmative reality which we limit or determine by negation, when we think of any particular object as possible. Now, as we have seen, the legitimate result of such a way of thinking is to merge all finite reality in the absolute substance. In other words, Kant has as yet found no escape from the dualism that absolutely separates thought and its object, except in a unity in which all distinction is entirely lost. At the same time he is so far from seeing that this is the necessary result of his logic, that he goes on to argue that the absolute Being must be conceived as a spirit endowed with absolute power, absolute wisdom, and absolute goodness. In fact, having once got his absolute reality, he drapes it in all the

"old clothes" of orthodoxy, without any consciousness of the opposition between the Spinozistic and the Christian idea of God.

Yet he rejects the idea that God unites in Himself all affirmative predicates.

While, however, this is true, it is not the whole truth. Already, in the treatise we are considering, Kant takes one important step towards the correction of the Spinozistic idea of the ultimate unity of Being and Knowing, when he lays down the principle, that though God is to be conceived as the *ens realissimum*, who is at once the highest reality and the ground of all other reality, he is not to be conceived as embracing all reality in himself. For there are, Kant argues, realities which it is impossible to combine in one subject, *e.g.*, extension and thought. "It is vain to try to evade this conclusion by saying that the qualities excluded are not true realities. The impulse of a moving body and the force which it holds together are undoubtedly positive: nor can the feeling of pain be regarded as a mere privation. The attempt to explain away the opposition of positive realities is due to a confusion. It is contended that two realities cannot be opposed to each other because, as they are both true affirmatives, they cannot be inconsistent as predicates of one subject. But though I admit that there is no logical contradiction between two positives, this does not exclude a real repugnance or opposition between them. Such repugnance on the contrary is actually found wherever one thing, regarded as a cause, annihilates the effect of something else. Thus the moving force of a body in one direction and an equal tendency to move in the other direction are not in contradiction: nay, they may actually exist in the same body at the same time. But the one annihilates the real effect of the other; and whereas each severally would have produced an actual motion, the effect of both together is zero: in other words, the consequence of two opposite moving forces is rest. But this shows that real opposition is different from logical contradiction; for nothing is possible which implies a contradiction. Now, in the most real of beings there can be no such real repugnance or opposition of attributes, the consequence of which would be privation or want; and as there *would* be such an opposition in Him if *all* realities were brought

together in Him as attributes, we are forced to conclude that, though all realities must be referred to Him as their cause, some of them must be regarded only as effects of his action and not as attributes of his being."[1]

Distinction of logical and real negation.

What is here suggested, it will be observed, is not a conception of the 'polarity of opposites,' or of the necessary relation of affirmation and negation. All that Kant says is that positives may be so opposed as to produce a negative result. In other words, he does not deny the possibility of a negation, which is nothing but negation, but he maintains that that is not the only form of negation. But to one with Kant's generalising tendency, the assertion that there is a negation which implies position or affirmation could not be long separated from the assertion that there is a position or affirmation which implies negation. By the side of logical affirmation and negation, which are supposed absolutely to exclude each other, Kant is, therefore, led to erect two new species, the position which implies negation, and the negation which implies position. Or to put it in a point of view which shows more clearly the effect of this great advance of thought, alongside of the analytic process of thought which moves by identity and contradiction, and which, therefore, cannot by any possibility pass beyond the limits of the conception with which it starts, Kant now places a synthetic movement which proceeds from the assertion of one thing to the negation of another, and through that to the assertion of a third. In this way Kant evolves the great distinction of analytic and synthetic judgment, which has such important effects in his subsequent philosophy.

What is real negation?

It is in the *Essay towards the Introduction of the Idea of Negative Quantity into Philosophy* that Kant for the first time definitely expresses this important distinction—a conception which probably, as Paulsen suggests, arose in his mind in connexion with his difficulty about the idea of God, but when once suggested, it found ready support and illustration in that view of matter as the unity of opposite forces to which he had already been led by Newton. Kant begins by pointing out that, according to the law of logical opposition, the opposite of any predicate

[1] R. I. 189; H. II. 129.

is its mere negative, but that in the mathematical determination of quantity, the opposite of $+A$ is $-A$, and pure negation is only reached through their union, so that $+A-A=0$. In the former sense, a union of opposites is an impossibility (*nihil negativum*), in the latter it is a simple privation or zero (*nihil privativum*). We should, therefore, be careful to distinguish between a negative quantity and the negation of quantity: for while the latter removes quantity and puts nothing in its place, the former is simply the opposite of the quantity that is taken as positive. Hence it is often indifferent which of two quantities we call negative and which we call positive: or rather, we should say that both taken abstractly are positive but that, when put together, they constitute a real opposition in which either member may be taken as positive and the other as negative. Thus impenetrability (= repulsion) may be described as negative attraction, or attraction as negative impenetrability, the one force being as positive as the other. Or to take an example from mind, attention may be represented as negative abstraction or abstraction as negative attention, since it requires the same positive effort to exclude from the mind everything but one object and to concentrate it upon that object: indeed the one is but the necessary correlative of the other.

Real position = negation of an opposite position.

These considerations open up a new vein of reflexion, for they suggest that the world may be regarded as the theatre of a conflict of opposite forces, in which the absence of a manifestation of activity in any one direction is the indication, not of the absence of any tendency to act, but of the equipoise of opposite tendencies. Thus every piece of matter, the elements of which are at rest as regards each other, is a coherent unity only as the result of the equilibrium of the forces by which its elements repel and attract each other; and in our moral experience inactivity is, or may be, the result of a tension between the consciousness of duty and the force of inclination. Conversely, when activity in any one direction begins, we are often obliged to recognise, not simply that one movement comes in the place of another that has ceased, but that the force which was previously keeping it back has been neutralised by an opposite force. Thus when a resting body begins

to move, it is because the equilibrium of forces acting upon it is disturbed, and its so-called inertia is overcome by a greater force. And, in like manner, when I begin to think of anything, it is not merely that other objects cease to occupy me, but that they are driven out by the greater power of the new object over the mind. So one desire does not simply come into the mind in room of another, but the former yields because it is driven out by what has been called "the expulsive power of a new affection."

The world as a unity of opposites.

These thoughts Kant applies not only to the different forces acting upon an individual object, but to all forces actual and potential in the world as a whole. For as every manifestation of force may be regarded as the locking up of another equal and opposite force (so that to make one force actual is to make an equal and opposite force potential), it follows that, as Leibniz has maintained, the sum of forces—meaning by that the sum of actual and potential forces—is constant. And indeed that sum, according to the same principles, is always zero, if opposite forces be taken from each other. Hence also, if we conceive the Supreme Being as a Being in whom there is no real opposition of elements, and therefore no such law of compensatory reaction, we must suppose the nature of his activity to be altogether different from any activity to be seen in the natural world either outward or inward.

Analytic movement of Thought and synthetic movement of Knowledge.

From this view of the real opposition Kant finally derives an important principle, which he extends not only to the real negation which is the result of an equilibrium of opposites, but also to real position which is the result of the disturbing of such equilibrium. This principle is that such negation and such position are altogether different from all merely logical negations or positions, which are simply the analytic development of given premises. In the latter we cannot move from positive to negative or from negative to positive; nor again can we move from one position to another which is different from it. In the former on the contrary we can and must make such a transition. There is, therefore, a marked contrast between the logical relations of ideas and the real relations of things, and we must go beyond the former in order to

understand the latter. "I understand, *e.g.*, how, when I assert that God is infinite, I am forced to deny that he is mortal: for his mortality would contradict his infinity. But how it is that by the motion of one body the motion of another is stopped, is quite another question. For we cannot say that the motion of one body is the contradictory or logical negation of the motion of another." And there is a parallel difficulty in the case of logical and real position. If I look at things in their logical aspect, I see that by the mere analysis of conceptions, "I can find, *e.g.*, in composition a ground for the assertion of divisibility, in necessity a ground for the assertion of unchangeableness, in infinity a ground for the assertion of omniscience, etc. In all these cases I clearly see the connexion of reason and consequent, for the consequent is identical with a part of the conception of the reason. But how one thing can follow from another when it is not connected with it according to the rule of identity, *that* is the point which I could very much wish some one to make intelligible to me." The real problem of knowledge thus escapes from the domain of Logic; for what is wanted for knowledge is not to explain how a conception remains identical with itself and repels its negative, but how, one thing being posited, the position or negation of something else is the consequence. Kant ends with these words, "I have carefully considered the nature of our knowledge as it is expressed in judgments in relation to reasons and consequents, and I shall shortly take an opportunity to communicate in detail the result of my inquiries. But the sum and substance of what I have to say is, that *the relation of a real reason to its positive or negative consequent cannot be expressed by a judgment but only by a conception*. We may, no doubt, sometimes reduce such a conception by analysis to simpler conceptions of real reasons, but in the end all our knowledge of this relation must terminate in simple and irreducible conceptions of real reasons or causes, the relation of which to their consequents cannot be further explained." [1] The meaning of this obviously is that reason and consequent are given in connexion with each other, and we must take them *as*

[1] R. I. 158-160; H. II. 103-6.

they are given. The formal laws of thought, as they show themselves in the act of judgment by which we analyse the content of our conceptions, do not enable us to explain any real or causal connexion of things, whether negative or positive. We are obliged, therefore, to fall back on an original unity of the conceptions themselves, *i.e.*, on a nexus in the matter of thought as it is given in experience, which it is impossible either to explain or to explain away.

Is Kant here following Hume? Reasons for a negative answer.

In the concluding words of this essay Kant seems to approximate so closely to the ideas and even to the language of Hume, that it is difficult to regard the coincidence as merely accidental. Kant seems to be insisting on the very point on which Hume dwelt with such emphasis, viz., that there is no link of necessary relation between the phenomena which we regard as cause and effect. On consideration, however, we see that, though there is a verbal parallelism, the premises from which the two writers start and the conclusions to which they are pointing are quite different. Hume was the interpreter of a philosophy the first principle of which was that all that is true in our ideas must be traced back to that which is given to the passive mind, and that all merely subjective additions to the facts presented must be fictitious and illusory. Hence, when he had shown that in the impressions or immediate experiences of the outer and the inner life there is no trace of that necessary connexion of antecedent and consequent, which is supposed to be involved in the idea of causality, he conceived himself at once entitled to treat such necessity as an illegitimate product of custom, a confusion of subjective association with objective reality. The conception of a synthetic power of thought was excluded *ex hypothesi*, and Hume, therefore, could not in his *Essays* have any intention of refuting it. Kant, on the other hand, inherited the tradition of a philosophy which sought to demonstrate everything by a purely logical process, and so to raise all sciences to the level of mathematics; and not only in this essay, but also in those earlier writings of which we have already spoken, we have found him asking himself the question how much the purely logical move-

ment of thought can do. In answer to this question he pointed out, in the essay on *The False Subtilty of the Four Syllogistic Figures,* that demonstration guided by the laws of identity and contradiction can only analyse what is given, and must, therefore, start with many indemonstrable principles. On the same grounds he proved, in the essay *On the only Possible Basis for a Proof of the Existence of God,* that pure thought cannot bridge the gulf between itself and objective reality. Finally, in the essay which we are discussing, he shows that logical and real opposition are essentially different, and that there is no parallelism between the movement of pure thought, in which we proceed according to the law of contradiction from the assertion of a predicate to the exclusion of its negative, and the objective process of things in which one positive reality, *e.g.,* one force, neutralises another. It is, therefore, only another step in the same direction, *i.e.,* another step in the proof that pure thought cannot by its analytic movement add anything to its content, when at the end of the essay he goes on to show that the causal relation,—involving as it does a synthetic movement from the *position* of one thing to the *position* of a different thing,—cannot be explained by the logical connexion of reason and consequent according to the law of identity. The result to which Kant points in this argument is just that which Hume is led by his argument to reject, viz., that the causal connexion must be given in experience. For whereas Hume sought to prove that the causal relation, because of its necessity, cannot be given in experience, Kant seeks to show that the same relation, because of its synthetic or ampliative character, cannot be derived from pure thought. When we take all this into consideration, the coincidence of expression becomes a matter of little moment: for, even if we could suppose that Hume's words were present to Kant when he wrote,—and the manner in which Kant speaks seems to preclude such an idea,—we could explain Kant's use of them only by supposing that he did not understand them, but read into them his own meaning.

Reason for a positive answer.

There is, however, one point that should be mentioned on the other side, and that is that Kant himself did not

always, even in his Critical period, clearly distinguish between the two sides of his argument, as against the German dogmatism and the English empiricism respectively. Frequently he seems to misunderstand Hume's reasoning and to suppose Hume to be refuting the doctrine that reason has ampliative power, when he was merely showing that no necessity of connexion is given in sense. Thus, to take one passage for many, we find Kant saying that Hume held "the increase of conceptions out of themselves, and what may be called the spontaneous generation of the understanding without being fertilised by experience, to be impossible. He regarded all supposed *a priori* principles as imaginary, *i.e.*, he supposed them to be nothing but habits springing from experience and its laws, and he therefore argued that they are merely contingent rules to which we falsely attribute universality and necessity."[1] Here, as in many other places, Kant puts together two aspects of synthesis, as ampliative of a given unity of conception, and as connective of given differences of perception, and argues that an *a priori* synthesis in the former of these senses is necessary to explain a *necessary* synthesis in the latter sense. And he attributes to Hume a consciousness of the whole problem which he himself sought to solve. Now, it is quite true that Hume dwelt upon the fact that, in the idea of the object we regard as cause, there is nothing to suggest that it has any connexion with its effect, except the sequence of the latter upon the former: but, as I have already said, he points this out, not in order to disprove the power of reason to amplify its conceptions, (which he assumed to begin with,) but in order to show that there is no impression from which the idea of the relation, as a necessary relation, of cause to effect, can be copied. So far, therefore, Kant seems to have always understood Hume in his own sense; a fact which is rather in favour of the views of those who contend that Hume's influence is already traceable in the *Essay on Negative Quantity*. But, on the other hand, in the critical period, the *ampliative* character of the judgment of causality is always, as in the passage just quoted, immediately connected with its *necessary*

[1] A. 765; B. 793. *Prolegomena*, § 4.

character as an *a priori* judgment, a point to which no reference is made in the essay.

Kant does not yet deal with the general problem of Causality.

Connected with this is the fact that Kant as yet has no difficulty as to the *general* principle of causality, but only as to the application of it in particular cases. "I am not going to let myself be put off with the words cause and effect, or with the words force and action. For if I regard a thing as a cause or attribute force to it, I have already thought of it as standing to its consequent in the relation of a real reason or antecedent; and then it is easy to explain my assertion of the existence of the consequent according to the law of identity." Kant here obviously omits to ask himself the question how a mind ruled by the law of identity, as he interprets it, should ever conceive the idea of such a relation as that of causality, or should attribute to it objective reality. The question as to the universal principles presupposed in all experience had not yet been suggested to him, and, therefore, he could not see the force of Hume's attack upon the idea of necessary connexion, as he afterwards saw it.[1]

Is Synthesis possible to sense?

In regard to the general problem of this essay, it may be instructive to refer by anticipation to the way in which Kant, at a later period, dealt with the contrast between

[1] It will be necessary to return to this subject in the next chapter and also in commenting upon the *Critique*. Here, however, it is necessary to refer to one point on which there is some misunderstanding. It has been maintained that Hume in his *Essays* deals merely with the relation of particular causes to their effects and not with the general principle of causality, which he discusses in the *Treatise*,—a point which is important because Kant seems to have known only the *Essays*. Now it is true that, in the *Essays*, Hume dwells upon the fact that we do not perceive any necessary connexion between events either in outer or in inner experience. "We are never able," he declares, "in any single instance to discover any power or necessary connexion." But he immediately infers from this that the general idea of necessary connexion is objectively invalid, "seeing that all our ideas are nothing but copies of our impressions." We need, therefore, to explain the idea of causality as a copy of a "new sentiment or impression, to wit, the customary transition of thought or imagination between one object and its usual attendant; and this sentiment is the original of that idea." In other words, the idea of necessary connexion is simply the generalised copy of this sentiment. Kant, on the other hand, is here dealing not with the impossibility of finding the idea of necessary connexion in experience, but solely with the impossibility of thought adding to its own content except by the aid of experience,—an impossibility which he always maintained, though he found a way out of the difficulty by the aid of his doctrine of the *a priori* forms of sense.

logical and real opposition. For then he maintained that, while the conception of real opposition cannot be derived from pure thought, it can be made intelligible by means of the application of pure thought to the *a priori* forms of perception. But this way out of his difficulty had not been suggested to him at the time of the *Essay on Negative Quantity*. All that Kant had as yet reached was the conviction that synthesis, negative or positive, is impossible to pure thought. Before the ideas of the *Critique* could be developed, it was necessary that Kant should learn the lesson of the empirical philosophy, and especially the lesson finally drawn from it by Hume, viz., that all synthesis, as a movement to integrate or connect, or at least *necessarily* to connect, elements given as different, is impossible to sense. If pure thought be confined to a movement of analysis, a movement by mere identity, pure sense, as Kant was to learn, is confined to a mere succession of isolated presentations without any unity. If the former supplied no principle of differentiation, if it could not go beyond the conceptions with which it started so as to add to them any new elements, the latter on the other hand supplies no principle of integration by which the "manifold" of sense, its endless difference and variation, could be brought back to unity. But both differentiation and integration are necessary for synthesis. The problem of Kant, as it was subsequently stated, was to explain how the analytic unity of thought could develop a synthetic power in relation to the difference of sense, and how the differences of sense could be correlated under the unity of thought. In the essay which we are considering, however, Kant has only grasped one element in the problem. He sees that thought in itself is condemned to a purely analytic movement, and he casts the burden of supplying not only the manifold data but their connexion upon experience, *i.e.*, upon perception. At the same time the clear distinction between the formal principles of knowledge derived from pure thought and material principles derived from experience, which he has already attained, marks a very important stage in his progress towards the critical point of view. He has "seen Leibniz with the eyes of Hume," or at least of Locke; it

remains only that he should "see Hume with the eyes of Leibniz."

Difference between the methods of Philosophy and Mathematics.

In Kant's prize essay *On the Evidence of the Principles of Natural Theology and Morals,* which was probably finished before the essay we have just been considering, the distinction between material and formal principles is more fully illustrated. Following Crusius, and developing the thought already expressed in the essay *On the False Subtilty of the Syllogistic Figures,* Kant points out that there is only one, or, if we distinguish the principles of identity and contradiction, two formal principles, but that there are many material principles of knowledge, *i.e.,* many propositions which are incapable of being proved. "Crusius is, therefore, right when he blames other schools of philosophy for overlooking these material principles and directing all their attention to the formal principles of knowledge. By the latter alone nothing can be proved, for such proof would require premises containing the middle terms whereby the logical relation of subject and predicate in the conclusion is mediated, and in looking for such middle terms we must finally come to first premises, beyond which we cannot go."[1] What, however, gives special point to Kant's essay is, that in it he for the first time deals with that distinction between the method of philosophy and the method of mathematics, a distinction on which he afterwards had so much to say. The example of mathematics has, he thinks, been a great snare to previous philosophy. Mathematical science was supposed to be the type of demonstrative science, and its great success in extending human knowledge had naturally led Descartes and Spinoza, Leibniz and Wolff to expect that the same method might be employed with equally great results in another department. But as Bishop Warburton had remarked, "nothing could be more fatal to philosophy than the imitation of the method of mathematics."[2] For the business of mathematics is not to analyse given conceptions, but by arbitrary synthesis to produce new conceptions that are not given. The few conceptions which it presupposes, the conceptions of quantity and space, it does not need to analyse. It simply takes them as they

[1] R. I. 103; H. II. 303. [2] R. I. 88; H. II. 291.

are given in the common consciousness. On the other hand, its own special objects are produced by the very act of mind that defines them: *i.e.*, we give rise to these objects by putting together given conceptions in an arbitrarily determined way. Hence we can be quite sure that there is nothing in these constructions of our thought except what we have put into their definition. Thus the definition of a circle is just a prescription of the process whereby the figure, to which we attach the name of a circle, is to be drawn: the circle is not given as an object *before* the definition, but comes into existence in virtue of it. Further, when we observe the method of mathematics, we find that, though the truths it establishes are universal, they are always demonstrated in an individual concrete instance, which is brought before the eyes or at least before the imagination. Thus to prove that space is infinitely divisible, the mathematician draws two parallel lines and one cutting them at right angles; then, from a point in one of the parallels, he draws lines passing through the perpendicular to various points in the other parallel; and from the infinite number of possible sections of the perpendicular in this one instance, he concludes to the infinite divisibility of space. But in philosophy we have to proceed in quite a different way. There we have not to produce an object by arbitrary synthesis, but to discover what is the nature of the object as it is given; not to combine elements apprehended separately, but to distinguish elements which are already united. Definition, therefore, is rather the ultimate end at which the philosopher has to aim, than the first point from which he starts. And it is far from easy for him to see things exactly *as* they are given, or to be sure that, in defining them, he has omitted nothing. Hence, most philosophers have sinned both by arbitrary combination of things which are given separately, and by arbitrary separation of things which are united and perhaps necessarily united. The fanciful synthesis which produced the Leibnizian conception of the "slumbering monad" is not more irrational than the dogmatism of other writers about the possibility of a soul without a body. Again, the sign which the philosopher must use to express any given conception is

not an individual instance in which the nature of its object is fully represented, but a word, an arbitrary mark, which in itself exhibits none of the characteristics of the object which it designates. He is forced to deal with his conceptions *in abstracto*, without being able, like the mathematician, to " envisage " them *in concreto*, and so to verify or correct them by the manifest congruity or incongruity of the elements united in them. From this it follows that philosophy cannot imitate the method of mathematics. It must proceed by analysis, not by synthesis; and, indeed, it must often be content for the time with an analysis which is far from complete. What it has to copy is not the method of mathematics, but the method which Newton introduced with so great profit into physical science. " According to his teaching it is the business of the physicist to determine by sure experiences (aided, of course, by geometry) the rules according to which certain natural phenomena take place. For, even though he may not thus be able to penetrate to the primary cause of these phenomena in the nature of material bodies, he can be certain that they act according to the laws discovered : and it is already an explanation of the complexity of natural events, when it is clearly shown that they fall under well attested rules. In like manner in Metaphysic, we ought to seek by sure inner experience, *i.e.*, by the immediate evidence of consciousness, to determine those elements which are manifestly contained in the conception of the properties of the things which we are examining; and though this may not reveal to us at once all that belongs to the definition of such properties, yet we may safely avail ourselves of our knowledge so far as it goes, as a sufficient basis for many inferences." So far, then, is it from being the case that we can proceed from a few simple notions to demonstrate everything, that we must rather allow that philosophy has many starting points : *i.e.*, in other words, that there are an indefinite number of material truths which we must take just as they are given. And if there is room to hope that some day we may be able to reverse our steps and to proceed as in mathematics from the simple to the complex, yet we must allow that that day is a long way off. " We are still very

far from the time when it will be possible to proceed synthetically in metaphysic: only when analysis has helped us to perfectly distinct and definite conceptions, will it be possible by synthesis, as in mathematics, to subsume all complex conceptions under the most simple principles." [1]

Coincidence of Kant's view with that of Locke.

From the last instance we see that Kant has not yet adopted the idea that the synthetic method of mathematics is impossible for philosophy. He sees, indeed, that mathematics has the advantage of a sensuous presentation of the objects *in concreto,* but he does not yet clearly oppose perception to thought as subjected to altogether different conditions. On the contrary, he thinks that the impossibility of applying the mathematical method is due to the fact that the analysis of conceptions has not yet been carried down to the simplest elements. As to the nature of the synthesis by which reason has advanced in mathematics, Kant tells us that it is an arbitrary synthesis; but it does not yet occur to him to ask how an arbitrary synthesis can be fruitful in the knowledge of objects. Kant says nothing to indicate that Locke had any special influence upon his mental development at this time. But we cannot fail to be struck with the coincidence between Locke's ideas and those of Kant, both in regard to the method of mathematics and to the possibility of its future extension to other subjects. For Locke, too, held that mathematical truths had "barely an ideal existence," its constructions not being "ectypes" of anything presented in sense, but "archetypes" constructed by the mind itself. But just for that reason they would seem to have no basis in, or relation to, experience, which is always particular and never universal: as Locke himself doubted the possibility of "general propositions on matters of fact." On the other hand, in spite of their ideality, the principles of mathematics were not to Locke mere definitions of nominal essences; they were not "trifling" or analytic propositions, but propositions which gave "instructive real knowledge"; in Kant's language, they were synthetic judgments. How such merely subjective synthesis should yet give real knowledge of objects, Locke does not inform

[1] R. I. 97; H. II. 298.

us, any more than Kant tells us how the "arbitrary combination" of simple conceptions should yet be a scientific process,—a process of the discovery of truth and not of the invention of fictions. What is still more remarkable is that both writers seem to throw out somewhat vague hopes of extending the method of mathematics to other subjects. For while Kant speaks, in words already quoted, of the possibility of applying the synthetic method to metaphysics at some future time, when the work of analysis has been completed, Locke hopes for an extension of knowledge by "singling out and laying in order intermediate ideas" in the same way that mathematics has singled out and laid in order the "intermediate ideas that demonstratively show the equality or inequality of unapplicable quantities."[1]

Relation of mechanical and teleological views of the world.

One other point is necessary to complete the account of Kant's speculation in this important year, 1763. I have already referred to the modification of the Ontological argument which he still accepted, and I have attempted to show that in it we may find an imperfect expression of the idea that knowledge presupposes an ultimate unity which is prior to all difference, even the difference of the intelligence and the intelligible world. This is an idea which Kant never completely lost sight of, though in the *Critique of Pure Reason,* it essentially changed its form and reappeared as the transcendental unity of apperception, which is presupposed in all experience. In the period we are considering Kant still regards God as the centre to which all must be referred; but it is God con-

[1] Locke's *Essay*, Book IV. 12, 7. It is necessary here, as Dr. Vaihinger points out, to guard against the confusion of the synthetic and the analytic *methods* in question, with the synthetic and analytic *judgments* which are the starting points of either. At this time (as we see from the *Reflexionen Kant's*, II. 292, *seq.*) Kant held that "all rational judgments are analytic, and all empirical judgments are synthetic"; or, in other words, that Philosophy starts from complex ideas or principles, *i.e.*, from ideas which contain distinguishable elements and which therefore, are expressed in synthetic judgments, though in another way they may be "simple" (R. I. 160; H. II. 106), *i.e.*, in the sense that their elements cannot be separated from each other. Both these, however, Kant derives from experience, nor does he yet ask how it is possible that complex ideas, the elements of which are inseparable, can be so derived. On the other hand, it is his view that mathematics arbitrarily puts together elements which are given in their simplicity, and therefore that it may be said to start from analytic judgments.

ceived simply as Being in general, *i.e.*, as a Spinozistic unity in which all difference is lost. Hence, as one of Kant's earliest commentators declared, it would be truer to say that Kant proved Being in the abstract to be God, than that he proved God to exist.[1] From the idea of this abstract unity Kant immediately advances to the idea of a spiritual God, on the vague ground that there is "most reality" in such a being. It is scarcely necessary to say anything in criticism of this sudden leap from the most simple and abstract to the most complex and concrete of conceptions. What, however, gives interest to the transition is the way in which Kant connects it with the opposition between efficient and final causes. After reaching the idea of God by the "high priori road," Kant proceeds to supplement it by means of an argument from experience. In doing so he first dwells,—in language which he repeated with little change many years afterwards in the *Critique of Judgment*,—on the way in which each geometrical figure, when its properties are evolved by mathematics, becomes a key to manifold problems in relation to the world of experience; while, on the other hand, it rests upon the idea of space as a unity in which all the peculiarities of it and all kinds of figures are predetermined. The principle of unity thus revealed in all the forms of the manifold world does not involve design, for it is a necessary consequence of the nature of space: yet it conforms well to the idea that there is a purposive unity in the original principle from which the world in space is derived. A similar thought is suggested to us by the way in which the necessary causal relations of things give rise to a certain harmony and order among them. This Kant illustrates in various ways, and particularly by his own discovery that the same mechanical laws, by which Newton had explained the present movements of the solar system, are also adequate to account for the formation of that system. Every such step towards the extension of the mechanical explanation of things by the laws of their action and reaction upon each other narrows the limits of the accidental, and points back to a

[1] Tieftrunk, quoted by Cohen: *Die Systematische Begriffe in Kant's Vorkritischen Schriften*, p. 33.

unity as the source from which all things come. On the other hand, it also limits the range within which the idea of final causes has to be applied. For a unity of design is necessarily an accidental unity, *i.e.*, a unity not given in the separate natures of the elements, which are combined in order to realise it. Such a unity we find in the organic world: for, except by reference to an ideal cause, which does not lie in the separate elements of the body, we cannot explain how their action and reaction should be subordinated to the life of the individual and the species. At the same time, there is much even in the organic world which we can account for by physical laws apart from special design, and still more, which we may be able to account for in the same way in future. And it is the business of science to extend such explanation as far as possible. It is not piety but sloth that would bid us rest in the *ignava ratio* of final causes. Those who do so, forget that when we show that a purposive connexion of things flows from their mechanical relations, we are also doing much to prove that that mechanism itself is the manifestation of a rational principle. On the other hand, however far we may go in this direction, we can see that there are, and will always be, limits beyond which the mechanical explanation of life and mind cannot be carried.

Germs of Kant's later views.

This attempt to "redd the marches" between mechanism and teleology need not detain us, as we shall find Kant afterwards reproducing the main ideas of it in a better form. It is, however, needful to notice it here, as it shows how Kant's mind was already working on lines parallel to those drawn in his *Critiques*. Especially it lets us see the germinal form of the conception that the unity of intelligence is implied in nature, even regarded as a system of necessity,—a thought which is, we might even say, the fundamental conception of the Critical philosophy. On the other hand, we may observe that Kant does not yet characterise the teleological principle as an "idea of reason," although he already insists upon those cautions against the resort to final causes, which were afterwards brought into connexion with the distinction of ideas of reason from principles of understanding.

Summary of the results reached by Kant in 1764.

The position, then, which Kant had attained at the

beginning of 1764, may be thus summarised. He had broken with the Wolffian philosophy and especially with its method. He had shown that mathematical demonstration is something quite different from the kind of logical deduction which Wolff had exemplified, and that the latter is merely a method of analysis. For the pseudo-synthesis of the Wolffians, who pretended to deduce all truth from general principles, he proposed to substitute a method of analysis which should begin by accepting the matter to be analysed from experience. The formal principles of thought would thus find their complement in a large number of "irreducible conceptions," and would necessarily give rise to as many propositions or judgments incapable of being proved. On the other hand, Kant did not renounce that idea of a unity of knowledge and of the knowable world, which was expressed in a theological form by earlier philosophers. All he did was to change the Wolffian back into the Spinozistic form of the ontological argument, or rather into a form which, even more distinctly than the Spinozistic, brings out the idea that that unity is the presupposition of all knowledge. Further, he attempted, in a method not altogether unlike that of Leibniz, to show that that unity expresses itself in our knowledge, at once as a principle of unity underlying the mechanical necessity of nature, and as a teleological principle which subjects nature to ends not included in itself. Finally, in all these investigations he was led to direct great attention to the question of the *method* of thought, and there is good evidence that he regarded all the special results yet attained by him as merely provisional. He had, so to speak, drifted from his moorings, and taken up a tentative and critical attitude, looking about for light in every direction and testing and comparing the different methods by which truth was to be attained. In the programme of his lectures in the Winter-Semester of 1765-6 Kant writes:—"The youth, just liberated from the discipline of the school, comes to the University accustomed to be taught, and thinks he will now be taught philosophy. But what he has really to be taught is to philosophise. Before any one can be taught philosophy, there must be a philosophy to teach: but where is it?

Who can show me a book and say:—'Here is wisdom and insight that can be depended on: learn to understand and to comprehend what is in this book, and build new conclusions upon it, and you will be a philosopher.' Till you can show me such a book of universal wisdom which I can appeal to, as to Polybius for history, and to Euclid for geometry, you must allow me to say, that you are abusing the confidence of the public in pretending to offer such ready-made wisdom: for all you really *can* do is to exercise the faculties of the youth committed to your care, with a view to a knowledge which they will have in the future to acquire for themselves. The true method of the instruction of youth is *zetetic*, as the ancients called it: and it is only when reason has been thoroughly exercised that it can in some cases become dogmatic." The tone of these sentences might leave it uncertain whether Kant is thinking more of the defects of the actual systems of philosophy or of the exigencies of the young, who need to be exercised to think rather than to be taught definite conclusions. But it was his conviction at this time that in Philosophy young and old are equally confined to the *zetetic* method. "Metaphysics," he had said not long before, "is undoubtedly the most difficult of the sciences, but it is a science which has not yet come into existence."[1] And in writing to Lambert in 1765 he tells him that the main conclusions which he had as yet reached were only in relation to method, and that even in that point of view his studies were not completed. "I have for several years been turning my philosophical reflexions in every possible direction, and after much tacking and turning, in which I was always seeking for the sources of truth and error in the manner of procedure, I have at length reached an assurance as to the method which it is necessary to follow, in order to get beyond that illusory appearance of knowledge which makes us think at one moment that we have reached a decisive conclusion and the next moment forces us to go back to the beginning again, and which is the source of all the hopeless discord in the opinions of philosophers. My habit now is always, in relation to every investigation I undertake, to examine first of all

[1] R. I. 88; H. II. 291.

what I *must* know in order to be able to solve the special problem before me, and what degree of knowledge is made possible by the data that are given. In this way my judgments are often more limited in scope, but they are likely to be more definite and secure than is common. All my endeavours, therefore, point, as the main interest, to the determination of the proper method of metaphysic and through it of philosophy in general." [1]

Prominence given to the question of method.

The question of method and of the theory of knowledge was now Kant's main interest and in view of it he held himself ready to sacrifice his most cherished opinion and traditional habits of mind. "If a man is in real earnest about the truth, he will at last be brought to the point at which he ceases to spare his own productions, even those which might seem likely to bring him some scientific credit. Everything he has learnt or taught he brings under an unsparing criticism." [2] Such are the words in which Kant describes his attitude of thought at this time, and he adds that this method "soon enabled him to see that the whole dogmatic theory was dialectical." He sought, however, to reach "something certain, if not in view of the object, at least in view of the nature and limits of philosophy." He had brought himself into an attitude of critical detachment from all speculative conclusions, and was ready to weigh the reasons for and against any of them with absolute impartiality, nay, even to lend all the powers of his reason to argue against the side towards which he was conscious of any bias.[3] In short he practised that "sceptical method," which he afterwards declared to be the true preparation for criticism. This did not involve any real indifference towards the settlement of those questions in relation to which (as he once said) "it is impossible for any rational being to feel indifferent." On the contrary, there are many indications to show that the ideas of "God, freedom and immortality," under which Kant brings all the problems of philosophy, were then and always the main ultimate interest of his speculation.

[1] R. I. 303; H. VIII. 655.

[2] *Reflexionen Kant's*, II. 4.

[3] Cf. B. Erdmann's introduction to the second volume of the *Reflexionen Kant's*, p. 41, where this point is illustrated in a striking way.

But he had learned more and more to distrust the philosophy of the schools and all its dogmatic ways of solving these problems without any preliminary inquiry as to method. He had observed how easy it is to maintain either side in such a controversy, or rather how easy it is to attack either; for in such disputes, as he said subsequently, the victory is always with the attacking party. And he had begun to suspect that the proof of either the affirmative or the negative in many cases lies beyond our reach. Nay, he had begun to ask further, how far it is necessary for our higher life that we should dogmatically solve such questions, and whether there is not a practical faith which can serve the purposes of human life better than the demonstrations of an intelligence which is unaware of its own limitations.

Essay *On the Dreams of Ghost-Seer.*

It is this temper of mind which expresses itself in that strange essay *On the Dreams of a Ghost-Seer as illustrated by the Dreams of Metaphysic,* published in the year 1766, in which he, *in the first place,* sets before us the conception of a world of spirits alongside of the world of experience, *then* tears that conception to pieces in the spirit of a narrow Empiricism, and *finally* withdraws from the question as one the means for dealing with which are beyond our reach. In examining the *Arcana Caelestia* of Swedenborg, Kant had been greatly struck with the symmetry and self-consistency of the system of the spiritual world as there pictured, and with its similarity to the universe of self-determined yet harmoniously acting monads, which had been conceived by Leibniz. He had also detected a curious coincidence between the view of Swedenborg as to the connexion of the spiritual and the natural worlds, and the view of Leibniz as to the relation of the world of phenomena to the real world of monadic substances. And this harmony he sets himself in a half-serious, half-humorous way to trace. If a spirit or a ghost be defined, according to the common notions on the subject, as a being that can be present in a portion of space without manifesting that property of resistance or solidity which distinguishes material objects, no one can say that such a being is impossible. To prove that such a being actually exists is another thing: for though good arguments have

been drawn from the nature of thought for the simplicity and indivisibility of the ego, this does not necessarily involve that the soul is quite different in character from the elements of matter. On the dynamic theory, matter itself is made up of points of force, which, taken in themselves, have no extension and which occupy space only as they repel each other. On the other hand, since we know that the elements of matter have impenetrability or repulsive force merely as a fact of experience, without being able to comprehend it or see its necessity, we cannot deny that substances without such a force are possible. But if we suppose the spirit or soul to be such a substance, we are landed in many difficulties as to the manner of its connexion with the body; *e.g.*, whether it acts upon the organism at one point or is present equally in every part of it. In the latter case the mode of its presence is incomprehensible, in the former case it is difficult to conceive it as acting on material substances without being itself one of them. Are we, then, to suppose that every element of matter has itself an inner principle of activity which determines its outer relations, and that the immaterial substance works upon that principle? There is something plausible in the idea of Leibniz that all monads are "representative"; for it is difficult to conceive how a simple part of matter should be possible without any inner state, and it is impossible to think of any inner state which is not analogous to thought. But, though we admit this supposition, it does not help us to see how a spirit and a body can form a unity, or how, if they form a unity, they can ever be separated. Still, having entered upon this perilous path of speculation, we have only to follow it out and we shall find ourselves rapidly constructing a system of the spiritual and natural worlds, which may take its place beside that of Leibniz or Swedenborg. "It is then as good as demonstrated, or it could easily be demonstrated, if the process were not too tedious; or, still better, it will be demonstrated at some future time, I know not when or where, that the human soul even in this life is bound up in indissoluble community with all immaterial natures belonging to the world of spirits, and that it acts upon them and is acted upon by them, though, as men,

we are not conscious of such influences so long as it goes well with us. And it is also probable, on the other side, that purely spiritual natures have no immediate sensitive consciousness of the material world: for they are not bound up in one personality with any part of matter, in such a way as to become conscious of occupying a definite place in the natural world and to apprehend through special organs of sense their relation to other extended existences, although they may be able to produce influences upon, and receive influences from, the souls of men, as beings of kindred nature with themselves. Hence, notwithstanding the communion between the two orders of spirits, it is impossible that those ideas which are received by the embodied spirit, as a being dependent upon the material world, should pass without change into the minds of purely immaterial beings, or that the thoughts of immaterial beings should without losing their peculiar character, pass over into the consciousness of men; for the contents of these different kinds of consciousness are specifically distinct." [1]

Possibility of a consistent Spiritualism.

Now, this idea seems to shed no little light upon our consciousness of ourselves as moral and spiritual beings. For that consciousness appears always to point to a unity of all spirits with each other, which limits their individual lives, just as the law of universal attraction limits and determines the movements of the different material bodies. "Is it not then possible to represent the phenomena of the moral impulses, which determine the reciprocal relations of conscious beings, as the effects of an active force which they exercise upon each other? May we not regard moral feeling as just the felt dependence of the particular upon the universal will, and as a consequence of the natural and universal interaction whereby the spiritual world attains its moral unity, as it forms itself according to the laws of its own connexion into a system of spiritual perfection? If we allow this thought to have enough verisimilitude to make it worth while to follow it out to its consequences, we shall find that they are such as to produce a certain prejudice in its favour. For, if it were a true thought, most of those difficulties would vanish,

[1] R. VII. 53; H. II. 341.

which arise out of the contradiction of the moral and physical relations of men upon earth. Thus the moral character of men can never have its complete effect in their outward life according to the order of nature, but it may realise itself fully in the world of spirits according to spiritual laws. The unrevealed goodness of many an effort which is thwarted in its result by defective power, or again the malice hidden beneath many an apparently good act, are for the most part lost, if judged by their physical effects in the material world: but, according to the idea suggested, they would have to be regarded as fruitful of consequence in the world of spirits; for in a world under spiritual laws, the connexion of the private will with the universal will,—that will which constitutes the world of spirits into a united whole,—would be such that each free act would produce an effect and call forth a reaction in exact accordance with its moral character."[1] Supposing this view to be true, it would follow that, even now in the present world, the spiritual subject must take the place among the spiritual substances of the universe which is appropriate for it according to moral laws; and it must take that place with the same necessity with which material bodies determine their respective places according to the laws of motion. And if in a future state the community between the soul and the material world should be broken off, the moral laws that already determine its relations in this world would continue to operate without a break. The only difficulty that remains unexplained is, how we are to reconcile the existence of such a spiritual community with the fact that we are so seldom conscious of it. For the spiritual world is present to man, if at all, only in occasional glimpses, which, besides, have often a somewhat uncertain and even irrational character. This, however, is already explained by what has been said of the nature of the consciousness of man as contrasted with that of purely spiritual beings. For what we experience as spirits will not naturally enter into that consciousness which we have of ourselves as men; or if it does so enter at all, it will only be under abnormal conditions, and even then the intimations from the spirit-world will necessarily

[1] R. VII. 56; H. II. 343.

take the form of the consciousness into which they intrude. Spiritual realities will be pictured as objects and events in the natural world, and all the imperfections of the medium will affect the vision. For men in general such perceptions will have something of the character of disease: and if there are a few exceptional individuals who are so constituted as to be continuously conscious of spiritual influences, their minds will be so much drawn out of proper balance as to the things of this world by the confusing presence of another, that they will often be regarded by other men as insane. In this way it only needs a little ingenuity to explain all the facts of ghost-seeing in accordance with our primary assumptions as to the relations of the two worlds. "For metaphysical hypotheses have wonderful pliancy; and it would show a great want of ingenuity not to be able to adapt *this* hypothesis to every story of supernatural visitations, and that without taking any trouble to investigate its truth, which in many cases it would be impossible, and in yet more would be discourteous, to attempt."[1]

The Empirical answer to Spiritualism.

After thus playing the spiritualist, Kant in the next chapter turns the tables, and writes what he calls an Anti-cabala, in which he endeavours from the point of view of ordinary common sense to show the hollowness of all such theories and hypotheses. "When we wake," it has been said, "we live in a world that is common to all: when we dream, we live each in a world of his own." This world of our own may be constructed by the intellect or the senses; by the "dreamers of reason" or by the kindred "dreamers of sense": in both cases it is removed from the ordinary tests of experience: it is not part of that order and connexion of things which is present to our waking consciousness. Its only criterion is self-consistency, and this criterion may be equally satisfied by many different systems of speculation and superstition, by a world of Swedenborgian ghosts alike with a world of Leibnizian monads. When, however, we ask what experiences can be appealed to in support of either, we find nothing except some sensible, and generally visual, appearances, which are presented in certain states of body

[1] R. VII. 63; H. II. 349.

to many men, and which to certain peculiarly constituted men are frequent or even constant. But the rational explanation of such facts is not supernatural powers but disease. Thus, a defect in the organ of vision may easily explain how the pictures of imagination, which we usually represent as merely mental phenomena, should appear as objects in the outward world. To suppose an influence of spiritual beings without us, in order to account for appearances which can thus be readily explained by an unhealthy state of the body (a state manifestly existing in many cases of supposed supernatural vision) is to neglect all the rules of scientific method. The ghost-seer should rationally be regarded, " not as a half-citizen of the other world, but as a candidate for the hospital."

Kant's critical solution of the problem.

Between these opposite views Kant does not decide. In fact, he seems to say that he regards the controversy mainly as an illustration of the " sceptical method " of balancing opposite theories against each other and so freeing ourselves from a false dogmatic attitude in regard to questions which we cannot settle. Enough for us is gained when we can set a purely physical theory against a spiritual or spiritualistic one, and so free ourselves from the strong bias of our own hopes and fears. In this way, Kant declares, " I have freed my mind from prejudice, and extinguished the blind credulity which opened the way to many a fictitious assumption of knowledge. . . . Formerly, I looked at the general intelligence of man from the point of view of my own intelligence; now I put myself in the place of an alien and external reason and observe my own judgments, with all their secret occasions, from the point of view of others. The comparison of these different views shows, indeed, many marked instances of what may be called mental parallax, but it is the sole means of preventing illusion and reducing our conceptions to the true place which they occupy in relation to our faculties of knowledge." [1] It is our hopes and our wishes, which throw themselves into one of the scales and make us lean to the belief in a community of spirits: otherwise, our theories would not be so exclusively taken up with the question how the spirit of man goes out of the world,

[1] K. VII. 74; H. II. 356.

to the neglect of the not less difficult questions how it comes into the world, and how it is present in it. But the "polemical discipline of the understanding" prepares us to admit that the whole subject belongs to the region of opinion and not of knowledge, in which dogmatic denial and dogmatic assertion are equally irrational. "I venture to assert that if the reader makes a proper use of what has been said, he will find in it the last word which philosophy has to utter about such spirits, and that whatever variety of opinions may appear in the future, no one will ever be able to know any more. This may seem a bold statement to make, when we find it impossible either by observation or by reasoning to exhaust the nature of any one object of sense, be it even a grain of sand or a drop of water: so immeasurable to a limited intelligence like ours is the complexity which nature presents even in its smallest parts. But it is quite different with the doctrine of philosophy in regard to spiritual beings. That doctrine *can* be completed, though only in a negative way. In other words, we can here ascertain with certainty the limit of our knowledge, and convince ourselves that, while we are able to observe the various phenomena of life and to discover their laws, we are totally unable to reach any positive determination as to the principle of that life. We may, indeed, suspect that there is a spiritual principle beneath the natural, but we cannot know it; for we find no data in our sensuous perceptions on which such knowledge could be based. We are driven, therefore, to resort to negatives, in order to determine that which is absolutely separated from all that is given in sense: though the possibility of even such negative determination rests neither on experience nor on reasoning, but solely on a fiction to which reason is obliged to have recourse in default of any other means of dealing with its object. On this footing, philosophy can be nothing but a doctrine of our necessary ignorance of a certain problematical class of beings; and, if it confine itself to this, there is nothing to hinder it from completely solving the problem set before it." [1]

Philosophy conceived as the theory of the limits of Knowledge.

In what remains of the essay Kant gives an account of

[1] K. VII. 77; H. II. 359.

the stories told of Swedenborg's prophetic powers, and also a sketch of the system of the spiritual world exhibited in the *Arcana Caelestia,* with the view of showing its general accordance with the spiritualistic theory previously stated: and in the end he returns to the lesson that metaphysic ("of which," he declares, "I have always been a lover though I can boast of few of her favours,") is unable to solve the problems which reason suggests as to the hidden nature of things, but that it can do much to teach us the limits of possible knowledge. The great importance of this negative use of metaphysic lies in the fact that it is only the known impossibility of gaining anything by attempting to go beyond these limits, that will induce men to confine themselves within them. "So long as it is thought possible to reach that distant goal of knowledge, so long it is vain for a wise simplicity to protest that we can do very well without it. The pleasure of advancing knowledge makes it readily take the appearance of a duty; and a deliberate self-restraint of reason seems to show, not the simplicity of wisdom, but a stupidity which hinders the elevation of our nature. For questions as to the nature of spirit, as to freedom and predestination, as to the future state, etc., at once set in motion all the powers of the intelligence, and draw men by their importance into a fever of speculation which subtilises and decides, dogmatises and controverts, with every new semblance of insight. It is only when such discussions give place to a philosophy which tests its own procedure, and takes account, not only of objects, but also of their relation to the mind of man, that the limits can be drawn closer and the boundary stones laid, which will henceforth prevent speculation from passing beyond its proper sphere. It needs some philosophy to discover the difficulties that surround many conceptions, which are treated by the ordinary consciousness as easy and simple. A little more philosophy drives away the illusion of knowledge which still remains, and persuades us that such objects lie entirely beyond the horizon of man's intelligence." [1]

Experience the source of all Knowledge.

Kant then proceeds to lay down the limits of knowledge in the same way as in his previous essays. We can

[1] R. VII. 101; H. II. 377.

analyse phenomena, he thinks, according to the principles of identity and contradiction, but ultimately such analysis always brings us to certain primary connexions of phenomena which we cannot get beyond. "The fundamental conceptions of things as causes and of their forces and actions are quite arbitrary when not taken from experience, and apart from experience we can neither prove nor disprove them. I know well that thought and will move my body, but I can never by analysis reduce this phenomenon, as a simple experience, to anything more simple than itself: I know that it is so, but I cannot tell why it is so. That my will should move my arm is not to me more intelligible than that it should hold back the moon in its course: the difference is only that I experience the former, but that the latter has never come under the observation of my senses." Hence, we can say nothing at all about the nature or existence of spirits without bodies; and of the actual *commercium* of soul and body we can only discover that it exists and that it has certain laws; but we are totally unable to explain the why or the how of this action and reaction.

Morality independent of Metaphysics.

When we have realised the impossibility of answering such questions, we are prepared to find that it is unnecessary for us to answer them. For, in the first place, the obligations of morality are not in any way dependent on the belief in another world. "Surely, the heart of man contains in it immediate moral prescriptions; nor does he require, in order to move himself to act according to his vocation in this world, to fix his lever upon another." The hope of immortality will not turn a knave into a righteous man, though it is a hope which springs up in all good men, as a natural accompaniment of their elevation of feeling. "Hence it appears more accordant with human nature and the purity of morals to ground the expectation of a future world on the feelings of a well disposed mind, than to attempt to base good conduct on the hopes of another world." A moral faith, *i.e.*, a faith that springs out of morality instead of pretending to prepare the way for it, is the only faith useful to man. And in this sense we may adopt the saying of Candide as true philosophy. Instead of seeking to know

what is too high for us, our business is to "cultivate our garden." [1]

Relation of the Critical Empiricism of the *Essay* to the Critical Philosophy.

I have given a somewhat full account of this essay, because it contains a curious anticipation of the critical philosophy on a lower level of speculation. The results are in many respects analogous, still more the general tendency. Here, as in Kant's later writings, we have the critical withdrawal from a problem which gives rise to an antinomy of reason, because it contains difficulties which are beyond the reach of the human understanding; and here, too, the thesis and the antithesis of the antinomy are derived from the dogmatic assertions of idealists or spiritualists and the dogmatic denials of empiricists. And to complete the likeness, we have here also a final recurrence to the moral consciousness as that out of which alone any rational faith can be drawn. On the other hand, while we find Criticism in this essay, it is still merely an Empirical Criticism. For in the first place, the antinomical results of the application of the intelligence to certain subjects is taken merely as a fact, and not explained. But, as Kant afterwards pointed out, the mere fact that all previous speculation has failed to deal successfully with certain problems does not of itself give us reason to assert that they are beyond the limits of our understanding: otherwise progress would be impossible. Ultimately, we can be finally prevented from discussing such subjects, only if it is shown from the very nature of our faculty of knowledge that it is beyond our power to deal with them. Now, it is true that in the present essay Kant supplies a kind of theory of knowledge and its limits, when he says that we are confined to the analysis of data which are given us in experience, and that the primary relations of things as causing changes in each other must be simply taken as facts. But this only shows that Kant has not yet asked himself the question: What is experience? In particular, he does not yet see that, if experience is the knowledge of a connexion of effects and causes, it involves something which is not given in sense. In other words, he is not yet aware that there is a synthesis involved in the assertion of the very principle of causality, as truly

[1] R. VII. 106; H. II. 381.

as in the act of judgment by which special phenomena are brought together under that principle. And it is only another oversight of the same kind that, while he shows that antinomies arise in the attempt to answer certain questions, it does not yet occur to him to inquire how we come to ask such questions at all. For an object must be in some sense within the reach of the intelligence, when it is possible to ask a question about it; and if so, it is hard to see how we should be able to know that the question is absolutely unanswerable. In all these respects Kant as yet falls short of an adequate consciousness of the critical problem, as he came afterwards to understand it. Such a consciousness could only be attained by a deeper investigation of the conditions which render *knowledge* possible within, and impossible beyond, certain limits, which yet are not absolute boundaries to all human *thought*.

Mendelssohn's objections and Kant's reply.

Meantime, the unsparing rigour with which Kant applied his *elenchus* and the occasional bitterness of his jests at the expense of the dogmatic philosophy gave some not unnatural offence to Mendelssohn, who, though not strictly a representative of the dogmatism of the previous time, yet upheld many of its traditions in a somewhat softened form. Mendelssohn was the most eminent of the popularising Eclectics, who tried to provide a philosophy adapted to a time of transition by a somewhat inconsistent mixture of different elements, held together only by a common-sense dislike of pushing anything to an extreme. To such a man the ruthless and fearless dialectic of Kant could not but be startling and annoying. In answer to a letter expressing these feelings Kant admits that his essay bore traces of the conflict of feeling under which it was written. "It was difficult for me," he says, "to find a way of expressing my thoughts without exposing myself to ridicule. It seemed to me, therefore, best to anticipate others by ridiculing myself. Yet in this I have proceeded quite honestly, since the state of my mind was in truth somewhat absurd. For I cannot rid myself of a slight inclination to attach credit to such stories, nor can I altogether regret the grounds of reason which support their possibility; and that in spite of the extravagances

which are connected with the former, and the hair-splitting subtilties and irrationalities which deprive the latter of their value." As regards metaphysic, Kant goes on to declare that he is so far from intending to cast any scorn upon it that he is convinced that "the true and lasting well-being of humanity rests upon it." But just in order to make room for a true metaphysic, he thinks that the time has fully come to drag off the dogmatic garb with which a false and pretentious philosophy has clothed itself. Of such a *Kathartikon* for perverted intelligence, it was the aim of his essay to supply a specimen. The special point to which it directed discussion might, perhaps, have been more clearly indicated: it was the question of the nature of the relation between the soul and the world, *i.e.*, both the natural and the spiritual world in which it has a place. "In my opinion, the first point necessary is to examine what data we have for the solution of the problem, how the soul is present in the world and how it comes into relation both with material things and with other beings of its own kind. In other words, it is necessary to discover what is that power of acting on things without and of receiving impressions from them, which is exemplified in the union of the human soul with a body. Now such knowledge must be derived either from experience or from reason. But there is no experience whereby we can come to know such a subject in the various relations which alone would reveal its external force and capacity and its harmony with the body; no experience which can throw light on the connexion of the inner state of the soul with the outer state of the matter of our body, and so on the connexion of an inner activity with an outer activity. Is it then possible to determine these forces of spiritual substances by *a priori* principles of reason. This question reduces itself to another more general question, viz., whether it is possible by reason to discover a primitive force, *i.e.*, the first fundamental relation of a cause and an effect. I answer with certainty that it is impossible. Hence I am reduced to the conclusion that, except in so far as such forces are given in experience, they are only fictions of imagination. Such fictions can never be proved to be even possible, and to say that they are thinkable,—

which appears to be the case only because we cannot show that they are impossible,—is purely illusory. For I have shown in my essay that, on the same method, I can defend the dreams of Swedenborg himself against any attack upon their possibility. The analogy, which I have there drawn, between the moral influence of spiritual beings upon each other and the universal gravitation of matter, is not to be taken as an earnest opinion of mine. It was intended only to show the ease with which we can advance in philosophical fictions, when there are no data to guide or check us; and at the same time to make manifest the necessity of considering what data are needed for the solution of the problem and whether these data are forthcoming. For, if once we were to set aside all proofs from the fitness of things and the divine designs, and to ask simply whether it is possible to derive from experience a knowledge of the soul, sufficient to reveal to us the manner of its presence in the universe both in relation to material things and to other spiritual beings, it would become easy for us to determine whether birth, life and death (in a metaphysical sense) are things which are within the reach of our intellectual insight. In short, the great question is whether at this point we do not discover limits fixed for us once for all by the finitude of our intelligence, as well as by the nature of the empirical data with which that intelligence has to deal." [1]

End of the pre-critical period.

We here see Kant at his nearest point of approximation to Locke. But, as he reached that point of view by a discovery of the defects of the opposite school of thought, he was the more ready to detect the incompleteness of the Lockian criticism, and, indeed, the inherent contradiction of an empirical criticism of experience. It was this discovery which was soon to lead to a partial recoil towards the Wolffian Rationalism and to give rise to that first imperfect synthesis between it and Empiricism, which is contained in the *Dissertation of* 1770 *on the Form and Principles of the Sensible and Intelligible World.*

[1] R. XI. 10; H. VIII. 674.

CHAPTER V

THE *DISSERTATION* OF 1770, AND KANT'S STUDIES FOR THE *CRITIQUE OF PURE REASON* IN THE YEARS 1770-1781.

Kant's reconciling tendency, and his polemical method.

IT has often been noticed that Kant, from the beginning to the end of his career, shows a tendency to seek for some middle term or higher reconciling principle between opposite schools of thought. "We are in a way defending the honour of human reason, when we reconcile it with itself in the persons of different writers of high intelligence, and discover the truth, which by such men is never entirely missed, even in their contradictory utterances."[1] This sentence quoted from the first published essay of Kant, in which he endeavours to find a way of combining the different views of Descartes and Leibniz upon *vis viva,* gives the keynote of most of his subsequent writings. To mediate between Leibniz and Newton was the aim of his first philosophical essays; to mediate between the English Empiricism and the German Rationalism may be said to be one of the main objects of the Critical Philosophy. The idea of criticism itself, as was shown in the first chapter of this work, springs out of the opposition of different dogmatisms and of dogmatism to scepticism, and it is essentially an attempt to reconcile them.[2] But this

[1] R. V. 189; H. I. 144.

[2] Note, however, that Kant always demands a real mediation of the opposite dogmatisms by "going back to the point from which their divergence began," *i.e.*, by rising to a point of view which is above the opposition and from which it may be explained; and that he had no toleration for a mere "splitting the difference," such as was common enough in the Eclectic systems of his time. "Moderation," he declares, "which tries to hit the mean between extremes (*welcher auf die Halbschied geht*) and thinks it can find the philosopher's stone in

reconciling tendency involves a willingness to do full justice to each side in the debate and to follow out the reasonings of each to their utmost consequences. Hence we do not wonder that Kant, like Plato, was deeply impressed with the advantages of what in the *Critique* he calls "the discipline of pure reason in its polemical use." As early as 1758 we find him announcing to the students who proposed to attend his lectures on metaphysic, that on Wednesdays and Saturdays he intended to treat polemically the doctrines expounded in the previous days; because in his opinion this was "one of the most excellent means to attain to profound views of any question." And at the end of the last chapter, we have seen that his essay on the *Dreams of a Ghost-Seer as illustrated by the Dreams of Metaphysic* is just an example of this method as it was practised by him in the period of what has been called his Critical Empiricism. The often-quoted sentence in the *Prolegomena* to the effect that it was Hume who "first awakened him from his dogmatic slumber" has probably a narrower reference; though Hume is sometimes taken by Kant as the general representative of the Scepticism that flows from the collision of opposite dogmatisms. But we can now place beside it an expression in a letter of Kant to Garve (dated September 21st, 1798), in which he gives a somewhat different account of this "awakening." "The point," he says there, "from which I started was not the discussion about the being of God or about immortality: it was the antinomies of pure reason in general,—from the first antinomy ('The world has a beginning: it has not a beginning') to the last ('There is freedom in man: there is nothing in man but necessity')—that first awakened me from my dogmatic slumber, and drove me to the criticism of pure reason, in order to remove the scandal of the apparent discord of reason with itself." And in one of the Reflexions which Dr. Erdmann has published, Kant tells us that it was in the practice of this

subjective probability, and which by heaping upon each other many isolated reasons, none of which is by itself convincing, supposes it can supply the place of the sufficient reason, is no philosophy at all." (R. I. 652; H. VI. 492.) Dr. B. Erdmann (see especially his Introduction to the second volume of the *Reflexionen Kant's*) first showed the full importance of the "polemical discipline" of the understanding in Kant's pre-critical development.

polemical method that the light of the critical doctrine first dawned upon him. "I saw this doctrine at first only in an obscure way. I endeavoured earnestly first to prove a proposition and then to prove its opposite; not in order to set up a sceptical doctrine, but because I suspected an illusion of the understanding and sought to discover wherein it lay. The year 1769 brought me great light."[1]

Relation of the polemica method to Criticism

The exact effect of his use of the polemical method is indicated in another of these Reflexions, which we have already quoted. "I discovered that the whole dogmatic theory is dialectical;" *i.e.*, according to Kant's use of the term "dialectical," he discovered that the antinomies of reason are not a mere accidental equipoise of reasons in particular cases, but that in all metaphysical questions there is something in the very nature of human reason which brings it into collision with itself. His next step, therefore, was to go back upon the subjective conditions of knowledge. "I sought to discover something certain, if not in view of the object, yet in view of the nature and limits of our way of knowing it." In other words, his failure to determine the objects turned his attention to the method of knowledge. His subsequent progress is thus described: "I gradually came to see that many of the propositions which were generally regarded as objective, are really subjective, *i.e.*, they are expressive of the conditions under which alone we can apprehend or comprehend the object."[2] "Before the Disputation" (*i.e.*, the *Dissertation*) "I had already got an idea of the influence of the subjective conditions of knowledge upon our knowledge of objects, which was soon followed by the discovery of the distinction of the sensible from the intellectual conditions. As yet, however, this distinction was viewed by me merely on its negative side."[3]

Idea of space found to be prior to the determination of external objects as such.

This last remark requires a little explanation. Kant's polemical method led him to consider the subjective conditions of knowledge. So far he had already advanced at least as early as 1766, when he wrote the *Dreams of a Ghost-Seer* and laid down the doctrine that Metaphysic

[1] *Reflexionen Kant's*, II. p. 4, § 4. In the introduction to these Reflexions Dr. Erdmann collects all the passages quoted in the last paragraph.

[2] *Id.* § 3.

[3] *Reflexionen Kant's*, II. § 6.

must henceforth become a doctrine of the limits of human reason. The next step, however, which brought him to the ideas of the *Dissertation,* was the distinction of the sensitive and the intellectual conditions of knowledge. Now that distinction was manifestly suggested by the results of an essay *On the Rational Basis for the Distinction of Regions in Space,* which was published in 1768. For in that essay Kant finally emancipated himself from the Leibnizian view of space and adopted a view kindred with that of Newton. Leibniz had conceived space as a confused idea of the relations of coexistent monads; and Kant himself, though he refused in some respects to adopt the Leibnizian theory, had maintained in the *Monadologia Physica* that it is a relation of points of force, which, taken separately, are not in space. Even in that treatise, however, it gave Kant some trouble to reconcile the discoveries of Newton,—which as stated by Newton himself were connected with a view of space as presupposed in, and prior to, all the substances that exist and move in it,—with his own modified Leibnizian theory.[1] And in 1768, he became convinced that such a reconciliation is altogether impossible. In a treatise published in 1748, the celebrated mathematician Euler had called attention to the difficulty of giving any definite meaning to the

[1] See the fourth chapter of this Introduction, p. 96. In Kant's earliest essay he maintained that space is a relation of substances which taken individually are not in space, and he even sought to deduce the characteristic property of our space, that it has three and only three dimensions, from the Newtonian law that bodies attract each other with a force that varies inversely as the square of the distance. Hence he thinks that we can quite reasonably suppose that there are other worlds in which bodies act on each other according to a different law, and in which, therefore, space has a different number of dimensions. "A science of all these possible kinds of space would certainly be the highest Geometry which a finite understanding could attempt." (R. V. 27; H. I. 22.) But with the new view of space as a universal form of external perception, Kant gives up all such speculations as to the possibility of a space of more than three dimensions, though he does not exclude the idea that there may be other forms of sense for other finite beings than men. Those who have maintained the possibility of space of more than these dimensions should consider what definition they could give of space that would leave open such a possibility. If it is defined, as Locke and others define it, as that which has *partes extra partes* (in German, as the *Aussereinander*), it seems impossible to carry out the conception of a space with more than three dimensions without contradicting the definition. But the subject is too wide to be discussed here.

highest laws of motion, and especially to the law of inertia, if the idea of space be taken as derived by abstraction from the relations of things; seeing that that law asserts the persistence of a material object in its state of motion or rest, so long as it is not acted upon by some other outward object. But this obviously implies that the body in question stands in a certain relation to space itself and therefore can be regarded as moving or resting apart from, or independent of, its relation to other material bodies. Starting from this suggestion, Kant endeavours to show that a similar relation to absolute space is involved in all determination of direction in space, and so in all the "perceptive judgments in relation to extension." For in all such judgments, it is presupposed that "absolute space has a reality of its own, independent of the existence of matter, and that it is itself the first ground of the possibility of matter as a complex or divisible substance."[1] In other words all determination of things in space presupposes, in addition to the determination of the relations of the different parts or objects to each other, a determination of the relation of the whole system of such parts or objects to an all-embracing space.

Priority of Space.

The argument is as follows. Space has three dimensions, and in it, therefore, we can draw three planes, cutting each other at right angles, "and as through our senses we know what is without us only so far as it stands in immediate connexion with ourselves, so it is in the relation of three such planes to our body, that we naturally find the first ground for the definition of the different regions in space." The plane at right angles to our body we call "horizontal," and by relation to it we distinguish the regions we call "above" and "below." The other planes enable us to distinguish the regions "before" and "behind," "right" and "left." In these distinctions we find a means of expressing differences which we can indicate in no other way. Thus a screw that turns to the right and one that turns to the left, may absolutely correspond in all their parts, but the one cannot be substituted for the other, or placed so as to coincide with it. The right and left hand, or the face and its image in the mirror,

[1] R. V. 294; H. II. 386.

are other instances of objects, which, though perfectly corresponding in all their parts and in all the relations of their parts to each other, yet cannot occupy the same space; such objects are what Kant calls "incongruent counterparts" of each other. Now, it is to be observed that in the distinction of these objects there is always implied a relation of their parts not to each other but to space beyond them. The order of the parts in any complex material body may be inverted without making the least change in their relations to each other, or to the body as a whole. The right is not distinguished from the left hand, except in relation to the space it occupies. And in like manner, the order of the heavenly bodies might be inverted without any change so far as their relations to each other are concerned. The difference would lie only in their relation to absolute space. Thus the complete ground for the determination of any material form does not lie in the position of its parts relatively to each other, but also in its relation to universal or absolute space: not, indeed, that this relation can be immediately perceived, but that distinctions of bodies can be perceived which rest only on this presupposition. Hence, "absolute space, though it is no object of external sense, is a fundamental conception which makes all such sense perception possible." [1]

It is, therefore, an *a priori* condition of perception.

The result thus arrived at seemed at first to be a complete confirmation of the Newtonian view of space, as opposed to the Leibnizian. But the words just quoted suggest a thought which was soon to give a new turn to Kant's speculations. The one universal space, which is presupposed in all determination of external objects, is not itself an object of external sense, but a "fundamental conception that makes external perception possible." It is, in other words, a presupposition of external perception which the mind brings with it, and without which it would be impossible to perceive any object as external. It is, in Kant's subsequently adopted language, a form of such perception, which is not derived from sense, but rather constitutes it as a "capacity of being so affected by objects as to perceive them." It is an "*a priori*" through which

[1] R. V. 301; H. II. 391.

alone there can exist for us any "*a posteriori.*" Kant adds that this must not lead us to "take it for a mere *ens rationis* (*Gedankending*)"; though, as he immediately goes on to say, there are many difficulties which arise out of this conception when we attempt to make its reality intelligible to ourselves through ideas of reason, "evident as that reality may be to the inner sense." In other words, Kant thinks that the argument of his essay is a complete refutation of the Leibnizian view, that space is a confused idea of the relations of monads which are not spatially determined at all. But at the same time, he sees that by his acceptance of the Newtonian conception of it as a reality presupposed in all external existence, he is landed in many difficulties from which the Leibnizian view had saved him. For space is continuous and divisible *ad infinitum*; it is, therefore, impossible to represent a world, of which space is the primary condition, as a completed whole made up of real or substantial parts. To Leibniz the world was a systematic whole, definitely determined as the greatest "sum of compossible reality," and its constituent parts were monads, *i.e.*, individual and indivisible substances. But a world in space cannot be conceived as a self-bounded universe beyond which nothing can exist, or as a whole made up of individuals which cannot be further divided. Though it presents itself to us as a complex whole or unity of differences, the world in space is incapable of being made intelligible to our understandings either in its unity or in its differences: for we cannot carry it back by analysis into its elements, neither can we mark out by any limits the sphere of its totality. Nay, we can see that from the nature of the case it is impossible to do either. On both sides the world escapes into infinity, and refuses to be known as we cannot but seek to know it. And the same difficulties reappear, when we try to conceive the development of the world as a series of states in time.

The world as *conceived.*

Now the object of Kant's *Dissertation on the Form and Principles of the Sensible and Intelligible World,* with which in 1770 he entered upon his duties as a professor, is to follow out to its consequences the antinomy just suggested, and to offer an explanation of it. This

explanation is derived from the distinction between the *a priori* conditions of perception and those of thought, or in other words, between sense and understanding, and it was suggested by the results of his essay upon *The Rational Basis for the Distinction of Regions in Space.* Let us first bring before us the precise nature of the difficulty or antinomy as it is stated by Kant. What are the elements involved in our conception of the intelligible world as we must think it? In dealing with this question Kant returns to the old answer which he had given in the *Dilucidatio Nova,* his first strictly philosophical work. For the first effect of the distinction which Kant now drew between sense and thought, was to free his original Rationalism from the weights that had been depressing it, and to restore it for a time to its former place in his philosophy. He maintains, therefore, that when we think of the world abstractly, we necessarily regard it as a unity, made up of a number of different substantial parts, which maintains its identity through all the changes of these parts in relation to each other. But this implies that we conceive it as having a certain *matter* of which it is made up, and a certain *form* according to which this matter is bound together so as to make up a world. The matter lies in the elementary substances which are its parts: the form lies in the way in which these parts are co-ordinated. Now, it is to the form that we must look to explain all possible influences of one substance upon another, and at the same time, the limit of such influence. For in order that the world may remain the same world, not only the identity of the parts, or substances out of which it is made up, must be maintained, but the changes through which they pass must be consistent with, and indeed be determined by, the characteristic mode of combination by reason of which they make one whole. Hence, finally, we must conceive the world as an absolute whole, which is definitely determined in itself, both in the multitude of its parts, and in the states through which they pass.

The world as *perceived.*

Now, when we regard the world as it presents itself to us in time and space, we find that it in every way refuses to be brought under such a conception as we have just given. For in space there can be no smallest parts, no

parts which we can regard as substances, and no whole which is limited and bounded in itself. And in time, in like manner, there can be no indivisible moments and no absolute beginning or end. Nor, in the idea of the unity of space or time can we find any principle to determine the connexion between the objects that exist and the events that take place in them. For time and space are forms in accordance with which phenomena may be placed in relation to each other; but they do not contain any principle in virtue of which such relations can be actually established. Nothing in the nature of space and time fixes any substance or any world of substances to a particular place, or any event or series of events to a particular date. For, wherever or whenever we place or date these objects and events, there is always left an infinity beyond, in relation to which the whole complex of substances and events is brought; while yet there is no ground in this infinity for determining the relation of anything to it.

Antinomy of Sense and Thought.

Now, when we look upon this picture and upon that, we begin to see that there is a collision between the conception of reality which we necessarily form to ourselves in pure thought, and the nature of that reality which we actually apprehend by sense as existing in time and space. How are we to explain this antinomy between the aspects of the world, both of which are necessarily presented to us? We cannot but seek to reduce all complexity to its simple elements, yet it is demonstrable that we never can divide any *spatial* or extended object into simple parts. We cannot but regard all changes as completely determined through the relations of the different parts to each other in the unchangeable whole; yet it may easily be shown that *in time* we can have presented to us only an endless series of changes, which determine each other successively and in which no absolute beginning or end is capable of being reached. We cannot but regard the whole of things as limited and determined by itself; but *as in time and space,* the world is either absolutely limitless, or it hangs in a *vacuum* which yet contains no condition to determine it to be when and where it is. These, and similar difficulties meet us whenever we begin to compare our ideas with each other; and they force us

to ask the meaning of this great dualism which runs through them, and which makes us take one view of the world when we contemplate it as it is perceived under the forms of time and space, and quite another view when in thought we regard it *sub specie aeternitatis*.

Opposition of the noumenal and phenomenal worlds.

Now, Kant's answer in the *Dissertation*,—and we shall see that, though with great modifications, it was his answer always,—is to revive the old Platonic opposition of the phenomenal and the noumenal worlds, of the world as it is to sense and the world as it is to intelligence. The antinomy arises, in other words, from the fact that we have two separate sources of knowledge, which are not completely in harmony with each other, sense and thought. Our general idea of the world, that which directs and underlies all the questions of the intelligence, is due to the activity of the intelligence itself. But the particular data, with which we strive to answer these questions, are due to sense and received under its conditions, though these conditions are such that the answer can never be adequate. "*Quas mens ab intellectu acceptas fert ideas abstractas, illas in concreto exsequi et in intuitus commutare saepenumero non potest.*"[1] There is a "subjective hindrance" in the nature of sense which makes it impossible to realise in particular what we conceive in general; and the consequence is that instead of one world of objects, we seem to have two; and the intelligence appears to be at variance with itself as to the nature of reality. This appearance of contradiction, however, merely arises from a confusion of that which is incapable of being perceived or imagined with that which is incapable of being thought. For while that which contradicts the laws of reason, that which is unthinkable, is impossible, that which cannot be perceived or imagined may quite well be possible. The general idea of the world, which the intelligence presupposes and on the basis of which it asks its questions, is not to be regarded as invalid, because, owing to the manner of our perception, we can never verify it in particular. On the other hand, if we suppose the mind to be thus hindered from working out its pure conceptions of reality by the defect of sense, it becomes possible to

[1] R. I. 305; H. II. 397.

lay down at least a negative principle, by which metaphysic may be guided in its determination of the noumenal world as the absolute reality of things. It must abstract from all the special conditions under which sense and imagination are found to represent their objects, and must confine itself to those determinations of reality which the intellect derives from itself alone.

Necessity of removing the conditions of sense from things in themselves.

In this way then Kant reaches what as yet he considers an adequate principle of criticism. Detecting that the determination of things as in time and space is not adequate to the demands of thought, he infers that we must regard such determination as applicable only to phenomena; and that, on the other hand, in order to determine noumena, we must abstract from time and space and so purify our metaphysic from those general principles of sense which have hitherto worked confusion in it. "There seems to be a need for a quite peculiar though merely negative science, (*Phaenomenologia generalis*,) which should precede metaphysic, and which should determine the validity and limits of the principles of sensibility, so that they may not confuse our judgments in relation to the objects of pure reason. For time and space, and the axioms that determine our perception of things under the relations of time and space, are, in reference to our empirical knowledge and all the objects of it, very real, since they express the conditions under which all phenomena and all empirical judgments are possible. But when we are dealing with any object, not as an object of sense but through a universal and pure conception of reason, *e.g.*, when we are regarding it as a thing or a substance in general, we are led into many misconceptions, if at the same time we bring it under the fundamental principles of sense." [1] It is the *sensitivae cognitionis cum intellectuali contagium* that has introduced the greatest confusion into metaphysic, bringing with it insoluble dilemmas as to the soul, the world, and God, and forcing us either to deny the reality of substances, especially of spiritual substances, or else to subject them all to the conditions of space and time. If we can free ourselves from this fatal source of error, we shall at once get rid of all

[1] R. I. 360; H. VIII. 663.

those obscure, and at present unanswerable, questions as to the seat of the soul, as to the eternity of matter, as to the omnipresence of God, etc., which have perplexed philosophy. For we shall be able to see that they all arise from our treating a subjective condition of our apprehension of things, as if it were an objective predicate of things in themselves. And it may well be that when we have cleared away such unanswerable, because irrational, questions as to the nature of things, the true questions, *i.e.*, the questions which can be answered, will make their appearance, and metaphysic will be established on a sound basis.

Subjectivity of sense and objectivity of intelligence.

The main point then is to show that time and space are not conditions of real being, but only of our modes of perceiving it. And this Kant attempts to do in a method almost identical with that which he afterwards followed in the *Aesthetic*. It may, however, be of advantage to follow his discussion of the subject in this earlier form, as some of the difficulties of the *Critique* arise from his never having substantially altered that form, even when the new elements of thought subsequently introduced rendered such alteration desirable. Kant, so to speak, built up the *Analytic* of his *Critique of Pure Reason* upon a repetition in the *Aesthetic* of the ideas of his earlier *Dissertation*, instead of reducing these ideas to an element in a new construction. Now the view which Kant presents to us in the *Dissertation* starts from a fundamental opposition of the phenomenal and the noumenal, or, stating it subjectively, of sense and thought. Sense is passive and receptive, and what is presented to it depends on the manner in which what he calls the *status representativus* of the subject is affected by the presence of the object. Intelligence is active, and its pure activity is shown in its forming for itself conceptions of things which are independent of all affections of sense by these things, but which for that very reason are objective, *i.e.*, refer to the things as they are in themselves. In other words, these conceptions have a real and not merely a phenomenal value, because they do not depend on the special character of the subject, which is shown in the modifications its sensibility can suffer, but on the universal activity of

reason which is the same in all rational beings. Hence it is clear that "*sensitive cogitata esse rerum repraesentationes uti apparent, intellectualia autem sicuti sunt.*"

Distinction of form and matter of sense.

This, however, as Kant goes on to point out, does not exhaust the theory of the relations of sense and understanding. To do that we have to distinguish between the form and the matter of sense, and between the logical and the real use of the understanding. As regards the former, the matter of sense consists in the affections to which it is subjected, while the form is the mode in which these affections are co-ordinated by the mind in being apprehended. The former, therefore, may be characterised as *a posteriori* and the latter as *a priori*. Neither matter nor form of sense, however, can be taken as expressing the real nature of things. The matter cannot be so taken: for "though sensation witnesses to the presence of an object which produces it, the quality of the sensation depends not on the object in itself, but on the nature of the subject as capable of receiving a certain modification from the object." And the form, though it gives rise to a certain general relation of the elements of the sensible, which is not contained in the sensible affections themselves, is yet not independent of these affections, but is merely "the innate law of the mind according to which it co-ordinates the affections it receives from the present object":[1] in other words, it is the result of an "internal principle of mind, according to which the various objects that affect sense take on a certain aspect as in being presented to us they coalesce into one whole." Again as regards the activity of intelligence, we have to distinguish between its logical and its real use, *i.e.*, between the formal process whereby it brings one idea under another more general idea, guided only by the logical laws of identity and contradiction, and the real process, in which it determines objects according to conceptions which are not derived from sense but produced by the pure activity of the intelligence itself. By the former, the logical use of the intelligence, we can rise to general or abstract ideas which express the common elements of sensible appearances; but this process, which is commonly called

Distinction of the logical and real use of intelligence.

[1] *Dissertation*, § 4.

experience, does not take us beyond phenomena and the empirical laws of their connexion. On the other hand, the intelligence in its real use is the source of what we may also call abstract ideas; not, however, in the sense that they have been abstracted from the objects of sense, but in the sense that they are produced by the mind in complete independence of them. These conceptions are grounded in the very nature of the intelligence, not indeed as "innate ideas," or ready-made conceptions which we find in our minds prior to all experience, but as laws of the activity of the intelligence, which it reveals when it is brought into operation in experience. Such are the conceptions of possibility, of existence, of necessity, of substance, of cause, etc., with their opposites and correlates.[1]

Knowledge through sense, distinct in kind from knowledge through intelligence.

Now, it is of the utmost importance to observe that the distinction between the sensible (including both the form and the matter of sense) and the intelligible, is one not of degree but of kind. To hold with Leibniz that the sensible is that which is confusedly known, and the intelligible that which is distinctly known, is to treat a real distinction of the data of thought as if it were merely a logical distinction. What is known through sense may be distinct, and what is known through intelligence may be obscure; but the kinds of distinctness and obscurity are different. The difference between perception and con-

[1] Here we may observe is the first distinct appearance of the *a priori* in Kant's later sense, *i.e.*, the thing, though not yet the name. The genesis of this conception may probably have been helped, as Vaihinger suggests, by the *Nouveaux Essais* of Leibniz, which were first published in 1765; though we cannot say that there is conclusive evidence of this in the language of the *Dissertation*, and we must remember that Kant was always familiar with the Leibnizian conception of the development of consciousness by inner self-determination. In 1763 he wrote (R. I. 155; H. II. 101) "There is something great, and, as I think, very true in the thought of Leibniz, that the soul embraces the whole universe in its consciousness, though it is only an infinitely small part of that consciousness which is clear. In fact all kinds of conceptions must rest solely upon the inner activity of our spirit as their ground. External things may, indeed, contain the condition under which they appear, but not the force that produces them." The idea of distinguishing a universal *a priori* element from an element which is particular and dependent upon an outward stimulus did not, however, as yet present itself to Kant, who at that time referred all synthetic principles to experience. But the discovery of the priority of space, in 1768, brought him into many difficulties which he could solve

ception is qualitative, as is that of the objects with which they have respectively to do. Phenomena and noumena are things essentially different.

Definition of the absolute reality as it exists for the intelligence.

Let us then see what are the characteristics, the merits and defects of each of these kinds of science. Metaphysic exhibits "the general principles of pure intelligence," and these culminate in a "certain archetype or *perfectio noumenon*," which we presuppose as the ultimate reality of things, and which at the same time we set before us as the ultimate goal of all our efforts, speculative and practical. On its speculative side we call it God, on its practical side, moral perfection. It may be described quantitatively as a *maximum*, which, however, we must remember, is not reached by adding, since rather all that falls short of it is defined by limiting it. Thus it is the common measure and principle of all knowledge, the same that Plato meant by his ideas, which are at once the ideals we aim at and the real being of things as distinguished from their appearance. In this sense God is the principle of knowledge, the ideal which guides it, and which it seeks to realise, because He is the absolute reality, the *principium essendi et fiendi* of all things.[1]

This general definition cannot be realised in particular through sense;

Of this ideal, however, which is also the absolute reality,

only by the idea of its *a-priority;* and the priority of the idea of God and of the general conceptions of causality, reciprocity, etc., could not but be interpreted in the same way. Thus Kant was forced to make a distinction, which even in 1766 he had overlooked, between the relations of particular causes and effects, which are supposed to be given *a posteriori*, and the general principle of causality which is derived from the mind itself. The element still wanting to the conception of *a priori* as it appears in the *Critique*, is the consciousness that *a priori* synthesis is not possible to perception alone or to conception alone, but only through the determination of the form of sense in conformity with the categories of the understanding. Already in the *Dissertation* (§ 8) he speaks of the pure conceptions as abstracted from the innate laws of the mind (by attending to its action on the occasion of experience), and therefore acquired and not innate ideas." See B. Erdmann, in *Philosophische Monatsheft*, XX. 67, where he traces the change by which Kant substitutes his own idea of the *a priori* for that of the Wolffian school: cf. also *Vaihinger*, I. 190, *seq.*

[1] In saying that the principles of pure intelligence "culminate in this archetype," Kant seems to anticipate what he afterwards expresses in the 4th section of the *Dissertation*, that the idea of God is the presupposition of the unity of the world as a world of individual substances reciprocally acting and reacting on each other. See below, p. 183.

we have only symbolic knowledge, for it is never presented to us in perception. We know it not intuitively but discursively; in the abstract by general conceptions, not in the concrete in its individual determination. Hence our pure intellectual conception of it has, as we have already seen, to be realised or specified by means of sense perceptions, which do not correspond with it. For all our perception or sensuous intuition is bound down to a certain formal principle, under which alone we can apprehend the individual as such; and the matter, which is apprehended under this form, is not the objective or noumenal reality, but only the sensible affection which it produces in us. We must, indeed, think of the divine intelligence as creating its objects, and so intuiting or perceiving them in their individuality by the same activity whereby it thinks of them in general. But *our* intelligence is *ectypal* not *archetypal*; it has to work with materials which it passively receives in the various forms of sense-perception, and therefore it cannot find itself again in the objects it apprehends, or, in other words, cannot realise and find in them the idea of truth which it brings with it.[1]

yet the things of sense are objects of knowledge.

On the other hand, though, for the reason just given, phenomena are not things in themselves or Ideas in the Platonic sense, yet this does not prevent them from being objects of scientific knowledge. For, in the first place, our sensitive apprehensions by their passivity necessarily bear witness to the presence of real objects which cause them, and this excludes any Idealism that would deny the existence of things in themselves. And in the second place, though these things are not present to us as they really are in themselves, we must remember that true knowledge consists in the agreement of predicates with the subject of which they are predicated; and that, when we speak of the things of sense, our objects are phenomenal as well as the qualities by which we determine them, being both equally conditioned by the forms of sense. Hence the two great empirical sciences of Physics and Psychology are not illusory, though they deal only with phenomena: and the same is true of the *a priori* sciences of Geometry and Mechanics as well as of Arithmetic, which are based

[1] *Dissertation*, § 10.

upon the forms of sense, and which form the very types of scientific exactness. So much may be said to show in what sense it is true and in what sense it is false that there is no possible science of the things of sense.[1]

In order to develop more clearly the contrast we have been exhibiting between the intelligible world and the world of sense, the noumenal and the phenomenal, it is necessary for us to show more definitely the nature of time and space which we have seen to be the forms of sense and so of the phenomenal world; and on the other hand, in opposition to these, to give more precision to the idea of the intelligible or real world and the forms by which we determine it.

Proof that time and space are forms of sense and so of the phenomenal world.

Now what we have to show is that time and space must be conceived as forms of sense which do not belong to things in themselves, but condition the perceptions which these things produce in us, *i.e.*, determine how the data of sense must be combined together in our perception of sensible objects. In order to prove this, we have to distinguish time and space at once from the matter of sense to which they give a characteristic form and from the conceptions of the understanding, the universal forms of thought, by which,—apart from all sensible affections and, therefore, from all special characteristics of our individual being,—we determine objects as they are in themselves. In the former point of view, it has been already pointed out that the mere affections of sense cannot give rise to a principle co-ordinating those affections; nor can we, as Leibniz supposed, rise from the special relations of objects in time and space to the ideas of time and space in general; for, on the contrary, these special relations presuppose the ideas of time and space and are particular determinations of them. Thus the ideas of simultaneity and succession cannot be made the basis of the idea of time, nor can we define time, as is sometimes done, as "the series of actualities which exist after each other"; for this "after" means "in different times," just as the idea of simultaneous actualities is the idea of those which exist at the same time. And it is to be observed further that "though time is of one dimension, yet the ubiquity

[1] *Dissertation*, §§ 11, 12.

of time (to use Newton's expression), according to which all sensible phenomena are somewhere, adds another dimension to the quantity of reality," and that the definition of time just given would leave no room for this second dimension. In like manner it is impossible for us to derive the idea of space from objects given as external; for in order to be given as external to each other they must be represented as in space and as occupying different positions in it. In other words, in determining objects as in space or events as in time, we are always determining a space or time which is presupposed in, and not itself produced by, the perception of the objects or events in question. Space and time are thus not the objects of perception, but the conditions which make it possible.[1]

Nature of the priority of space and time.

On the other hand, the priority in question is not the priority of a genus to its species, of a conception to the particulars that fall under it. It is the priority of an individual whole to the parts into which we divide it, and which cannot be represented except as in it. All spaces are in space, all times are in time: and if we speak of several times and spaces, they are not separate wholes which have a common element, or which become one merely by aggregation, but special limitations of the one space and the one time. Hence time and space are objects of perception, and of pure perception; of *perception* because individual, of *pure* perception because not derived from sensation but prior to, and presupposed in, objects of sense, as supplying the basis for certain relations which necessarily are established between all such objects. For time is a necessary condition of all phenomena, and space is a necessary condition of all external phenomena. Only this view of time and space can make intelligible the way in which mathematical science determines *a priori* the relations of objects, relations which are not analytically developed from the general conceptions of time and space, but intuitively discerned when we make certain constructions in time and space. Thus it is that we perceive that space has three dimensions and time only one, that parallel lines can never meet, etc. Hence Geometry does not demonstrate its universal propositions by thinking its

[1] *Dissertation*, §§ 13-15.

objects through general conceptions, as is the way with the objects of intelligence, but by bringing them before the eyes or the imagination in individual perceptions, as is the way with the things of sense. And, as a confirmation of this view, the essay *On the Rational Basis of our Distinction of Different Regions in Space* has shown also that the difference between "incongruent counterparts," a difference necessarily implied in all determination of objects in space, cannot be defined except by bringing before our mind's eye the space of which they are the limitations.

Continuity of space and time.

The nature of time and space will be still further illustrated, if we refer to their continuity, *i.e.*, that characteristic which makes it impossible to resolve them into simple parts, or take away their complexity. The reason of this is, that through time and space we can think nothing but relations, and in a relation there must be a difference of terms. Hence to deprive time and space of all complexity were to annihilate them. Moments in time, points and lines in space, are not parts of time and space, but only limits which we cannot conceive except in relation to that which is limited.

Comparative view of the Newtonian and Leibnizian ideas of space and time.

From all this we gather that time and space are not objective and real, not substances, nor accidents or relations of substances; but subjective or ideal conditions which the mind brings to its perceptions, and by which it co-ordinates them. For, *e.g.*, space is not something in which things can be contained, and by reference to which they can be placed. Things are in space only as they or their parts stand in a certain relation to each other. Yet we cannot identify space with this relation, else we should lose the distinction of regions in space. Space thus seems to hover between an adjective and a substantive, being the presupposition of certain relations without being anything to which they can be attached, or which itself determines them. And the same is true of time. Hence the Newtonian view of space and time has an element of truth in it, in so far as it leaves room for the priority of space and time, as the presupposition of certain relations of things, and thus is consistent with the possibility of Geometry as an *a priori* science, which yet is

objectively valid in relation to all external phenomena. But while it thus secures a basis for mathematics, the Newtonian view involves the absurd idea of "the real existence of infinite relations apart from any things related,"[1] and by making space and time the conditions of all existence it lands us in a materialistic theory of the universe. The Leibnizian view, again, which regards space and time as abstracted from the relations of things as given in sense, avoids these difficulties; but it fails to explain the priority of the ideas of space and time and the *a-priority* of mathematical science. On the other hand, the Kantian view explains how it is that time and space should be prior to all objects of perception, as being the subjective presuppositions under which alone objects can be perceived, presuppositions which the mind brings with it to perception, not indeed as innate ideas but as internal laws of the mind that determine how it must co-ordinate the matter of its affections so soon as its sensibility is stimulated.

Difference and relation of time and space as forms of sense.

Kant concludes his theory of the *a priori* forms of sense by noticing that the two forms are not altogether independent of each other. For if we compare them, we see that space is a determination of objects as such, while time has to do with states, and principally with the states of the subject as representing or perceiving objects. Hence time stands between the conceptions of the understanding and the perceptions of sense. Viewed in the latter relation, time depends upon space for the completion of its intuitive determination as an object; for we have to represent time as a line, and its limits, the moments of time, by points. On the other hand, "time approaches more nearly than space to a conception of the understanding, as it has greater generality and embraces all things in its relations, both space itself and also properties which are not comprehended in relations of space, to wit, the

[1] Cf. Kant's letter to Herz (R. XI. 29; H. VIII. 692) where it is said that "space cannot be supposed to be objective, or (therefore) intellectual (*i.e.*, a conception of the pure intelligence) because when we analyse it, we find neither the idea of objects (which can exist only in space) nor a real connecting link between them (which at any rate could not be asserted apart from any object connected), *i.e.*, no causal relations in which one thing could be regarded as the ground of determinations in another."

thoughts of the mind." Nay more, time, though it does not dictate laws to the understanding, yet conditions the action of the understanding in comparing its conceptions. For though it cannot be asserted that there is no impossibility except that a thing should be and not be at the same time, it may safely be asserted that we cannot judge that anything is impossible except as it involves this.[1] Again, though it cannot be asserted that there is no dependence of effect upon cause except where the former is posterior in time to the latter, it may safely be asserted that, apart from their position in time as prior and posterior, it is impossible to discover their relation as cause and effect. Lastly, even the quantity of space itself cannot be determined by us, unless we express it by number in relation to a certain unit, and number is a multitude which is distinctly known by successively adding one to one in a given time.

Pure conceptions necessary for the determination of objects in relation to each other.

The general result of Kant's argument as to space and time is to show that they are forms which objects must take on, as objects of perception to us, *i.e.*, as co-ordinated in relation to each other in our sense perception of them, but that they are not principles of the co-ordination or relation of objects as things in themselves. They do not explain how individual things can form part of one world and act upon each other. We cannot, consistently with the view we have taken of space, say that things act on each other because they are in one space: rather we must say that it is because they act on each other, that they appear to us as in one space; and we must, therefore, look for some other principle of relation than space, which may make the fact of their reciprocal action and reaction intelligible to us. Now no such principle of connexion between individual things is involved in their existence; for the conception of individual substances does not imply any relativity, or, at least any relativity except, if they are contingent substances, to their cause. Thus if objects existed necessarily, they could have no reciprocal relations whatsoever, because no dependence on anything but themselves. Their existence *in mutuo commercio* is, therefore, possible, only if they are dependent substances and if they

[1] A view which is rejected by Kant in the *Critique*. A. 153; B. 192.

all depend upon one cause. *Unitas in conjunctione substantiarum Universi est consectarium dependentiae omnium ab Uno;* and the same Being who creates the matter of the Universe, *i.e.*, the substances of which the world is made up, must also give it that form by which all these substances exist *in mutuo commercio*. Further, we must apply this principle also to the relation of knowledge, the relation in which the substances we call minds are so connected with other substances as to know them. We must explain such knowledge, in other words, by the dependence of the knowing substance as well as of those that are known upon the one Being who gives them existence and binds them together as one world. Hence the unity of space and the unity of time, which are the presuppositions of our perceptions of the world, are themselves to be explained as the forms in which this higher unity presents itself to us. Space, which is the necessary and universal condition of the coexistence of all things together with each other, may be called *Omnipraesentia Phaenomenon*. And time, which is the universal and necessary condition under which all the changing states of things are represented by us as states of one permanent world, may be called *Aeternitas Phaenomenon*. Such thoughts, however, seem to Kant to carry us beyond the limits of our finite intelligence, and to be too closely akin to the mystic "seeing all things in God" of which Malebranche had spoken.[1]

Kant's view of the results of the *Dissertation*.

In the concluding remark to which we have just referred, Kant shows himself dissatisfied with the results of his work on the positive side, *i.e.*, in so far as it leads to the development of a new metaphysic; and in a letter to Lambert he declares that the whole of those results must

[1] *Dissertation*, 22. Cf. Kant's lectures on Metaphysic published by Politz (pp. 113, 338) to which Dr. B. Erdmann first directed attention in the *Phil. Monatsheft* (XIX. 133). Also *Reflexionen Kant's* (II. 106, 123, etc.). These passages show that the view above expressed, according to which God is conceived as mediating between the mind and its object, was no mere passing thought, but that for some time Kant rested in it, as supplying a means of connecting his new idea of space and time with his earlier theory that the existence of God is the presupposition of all thought and being. How this conception makes way for the idea that the unity of the conscious self is presupposed in all experience, we shall soon see.

be regarded as provisional,[1] and that the real value of the *Dissertation* lies in its negative side, in those sections that show that time and space should be taken as determinations of phenomena and not of things in themselves. At the same time, he declares that the positive side is that for which ultimately the negative exists: in other words, it is as a step towards a new metaphysic or science of things in themselves, that Kant seeks to show that the determinations of time and space are to be taken merely as determinations of phenomena. This remark will be found afterwards to be important in considering Kant's object not only in the *Dissertation* but also in the *Critique*, which was the ultimate product of the course of speculation upon which he had now entered.

Kant *explicitly* determines the perceived world as phenomenal from the point of view of intelligence.

In order to appreciate the merits and defects of the *Dissertation*, we have to keep before us the fundamental conception upon which Criticism rests. Self-criticism means self-transcendence. It implies that the critic has reached a point of view from which he can look down upon the previous work of his intelligence, and see what is its limit or defect. The application of this to the present case is obvious. To talk of phenomena except in relation to noumena, or of a consciousness of the phenomenal as such, except in relation to a consciousness which in some way reaches to the noumenal, would be absurd; for it is only through its opposition to the noumenal that the phenomenal has any meaning. Now Kant's method of thought in the *Dissertation* is in conformity with this principle; for he maintains that man has not merely a receptivity for impressions, but a universal faculty of intelligence or understanding, which by its pure activity can determine things as they really are. It is true that this universal faculty is brought into play only in response to the stimulus of sense; but the conceptions, which are its products, are not the results of that stimulus, nor can they be explained by it either in whole or in part. Hence, when we direct our attention to these conceptions and work out their full meaning, they, in Kant's language, "issue in a certain *exemplar* or archetype, which we can perceive only by the pure intelligence, and which is the common

[1] R. I. 360; H. VIII. 663.

measure of all other things as realities;"[1] *i.e.*, they give us a conception of what reality or the object of knowledge *must* be in order to satisfy our idea of knowledge. This conception of that which reality must be, is what Kant tries to exhibit in outline, in the section of the *Dissertation* on the form of the intelligible world, and by it he judges the ideas of the world which are derived from sense. Thus the knowing subject, in so far as it is passive and dependent upon sense, is regarded by Kant as an object like other objects; and its perceptions are conceived to be merely states of its own particular being, dependent on the way in which it is affected by other beings and things. But in so far as it is an active intelligence, it apprehends itself and all other objects in their true nature, and can, therefore, criticise itself, and recognise the subjective or particular character of its own perceptions. In this way, it can see its own limits without being able to get rid of them; for, as active intelligence, it necessarily takes its stand upon certain general ideas and conceptions which it cannot but regard as true, while yet it finds itself altogether unable to realise the idea of truth involved in these conceptions by means of the only perceptions given to it. It is obliged to make demands upon itself which it cannot fulfil, to *conceive* the object of knowledge as that which yet it can never *perceive* or *imagine*. And if it insist on bringing together the two disparate elements of knowledge and working out its conceptions in relation to perception, it is necessarily involved in an antinomy which is absolutely insoluble. The conclusion, therefore, which Kant draws from his analysis of knowledge is that a true metaphysic must be reached by abstraction, not only from the particular data of sense, but also from the forms of time and space, which have application exclusively to these data.

But also, *implicitly*, he condemns the intelligible world as unreal from the point of view of perception.

It is, however, to be observed, that this conclusion involves really a twofold criticism: a criticism of our knowledge of things through the conceptions of the intelligence, as well as of our knowledge of phenomena through sense-perception, though it is only to the latter criticism that Kant here specially directs our attention. For while

[1] *Dissertation*, § 9.

he shows that our knowledge through *perception* is imperfect, inasmuch as it does not correspond to the demands of intelligence, at the same time he shows that our knowledge through *conception* is equally imperfect, since it can never be realised *in concreto,* can never become a knowledge of things in their individuality. Indeed, he expressly asserts that "a thing which cannot be known in any intuition or perception, is unthinkable, and therefore, impossible"; [1] and he declares that the only organ capable of grasping the absolute reality would be "a pure intellectual intuition" which apprehended things not only generally through conceptions but in their individuality, which, therefore, was not only active but creative. But even to speak of such an "intellectual intuition," is to go beyond a criticism of the perceptions of sense in view of the conceptions of the intelligence; it is to criticise both these elements of our knowledge in view of a still higher ideal; it is to compare our dualistic mind, with its two disparate faculties of intelligence and sense, with the idea of a mind in which this difference does not exist or is overcome. Yet Kant says that an intellectual intuition, which is not limited by the forms of time and space, is a thing which "*nullo mentis conatu ne fingendo quidem assequi possumus,*" which we cannot set before us in thought even as a possibility. It would seem, therefore, that Kant here takes his stand at a point of view which he at the same time declares to be impossible. Or he sets before us as the idea of truth or of absolute knowledge a conception, which he declares in the same breath to be made up of elements that are for us irreconcileable.

The source of this inconsistency.

The key to this inconsistency, an inconsistency which affects the whole argument of the *Critique,* lies in this, that Kant's method, or rather his *professed* method,—for in reality, as we shall find, he is guided by a higher principle than that which he explicitly admits,—is one of abstraction. The conception of existence in time and space is not one upon which we can rest as final; or, to put it otherwise, such existence, when taken as a *res completa,* falls into contradiction with itself. Thus space cannot be conceived as limited and bounded by itself, but only as

[1] *Dissertation,* § 25.

that to which limits or bounds are set by another. It is the infinitely extensible, the infinitely divisible, not the infinitely extended or the infinitely divided. It cannot, therefore, be conceived as determining the world which is in it; for, as Kant points out, there is nothing in space which affords a condition for determining the world to exist at any particular place, and therefore a determination of the world in reference to pure space is utterly impossible. Nor again is there anything in time which can supply a rational ground for the beginning or ending of that which is represented as in time. Hence, when we take the world as simply a world in time and space, we fall into an antinomy, because we take as self-bounded and self-determined, as a complete reality, that which yet is only an abstraction. The world in time and space *must* be taken as limited, and there must be an end and a beginning to it, because we have set it up as an independent whole, a complete reality in and for itself. And it *cannot* be conceived as so limited, because of the very nature of time and space; for they, *ex hypothesi,* are the only things that limit it, and they can supply limits to nothing, but rather require to be limited by something else than themselves.

Two methods of solving the difficulty.

What inference, then, are we to draw from this antinomy, or how are we to solve it? Two possible ways out of the difficulty suggest themselves. We may suppose that the key to the difficulty is to be found in the fact that time and space are in themselves forms of sense, in which reality cannot be adequately given, and that therefore, we must abstract from both in order to reach the conception of things as they are. Or we may say that in the conception of the world in space and time, as a thing in itself, a *res completa,* something is left out which is necessary to the determination of the world as a complete reality, and that it is just from this abstraction that the difficulty arises. It is the former line of thought which Kant follows when he declares that the mind, owing to the nature of its perception, cannot work out in the concrete the conception of reality which it yet must assert and assume in the abstract; and that "*sensitive cogitata esse rerum repre-sentationes uti apparent, intellectualia autem sicuti sunt.*"

In other words, Kant falls back by abstraction on that general conception of reality with which the idea of a world in space and time was found not to agree, and through this general conception, taken by itself, he supposes that we have true knowledge of things. At the same time that he does this, however, Kant is forced to recognise that the knowledge thus attained is imperfect, because merely general; and that, therefore, the element left out in it, the element of the particular, needs to be restored in some other form. In other words, the abstract conception taken by itself as the whole truth or reality would be in contradiction with itself; it does not provide out of itself the matter to which it shall be applied; it does not limit, or determine, or individualise itself. Just, therefore, as the world could not be conceived as limited and determined by space and time, since space and time require themselves to be limited and determined by something else, so, on the other hand, the limits or determinations by which phenomena are brought to the unity of conception, cannot be regarded as realities independent of the matter which they determine. Hence a further abstraction becomes necessary. The reality of things, since it cannot be apprehended by our divided intelligence *either* through perception *or* through conception, either through sense or through understanding, must be apprehended by an intuitive intelligence, for which the division of the two does not exist, or by which it is transcended; *i.e.*, it can be apprehended only by an intelligence which is entirely different from ours.

Results of Kant's method of abstraction.

This may be put more clearly as follows. The process of knowledge, as Kant represents it, is a process in which limits and determinations of thought are applied to that which, in itself, is unlimited and undetermined, because given as in space and time. In this process, however, it is found that the intelligence can never satisfy itself; for it can never attain to a limit either in analysis or in synthesis: it can reach neither simple unity nor totality in space; it can reach neither beginning nor end in time. Hence conception condemns perception. But on the other hand, conception is insufficient in itself because of its generality, and it is only to that which is other than itself

that it can be applied; it is only in bringing that which is given in the difference of space and time to the unity of thought, that the conception can find a meaning. Hence perception equally condemns conception. Or rather, criticism, which took its stand at first upon conception to condemn perception, and then upon perception to condemn conception, is now forced to make a still further regress, and to condemn the dualism of perception and conception in view of a unity of intellectual intuition in which that difference altogether disappears. Such intellectual intuition, however,—reached as it is by abstraction from the dualistic mode of thought, in which conception and perception are essentially opposed,—must immediately be recognised as an empty idea, even the possibility of which we cannot imagine. For in speaking of it, we are simply giving to an unknowable unity a name, made up of two terms from the difference of which abstraction is to be made, while yet we recognise that these two terms are absolutely irreconcileable and that, therefore, when we abstract from their differences, we leave nothing behind.

His apparent process of abstraction conceals an opposite process.

In the above, we have been following Kant's logic by which he first abstracts from perception in its difference from conception, then from conception in its difference from perception, and finally ends in an abstract unity, of which logically nothing can be said, but which he is obliged to name by combining the two. If, however, we realise the meaning of this process, we shall see that it is not correctly described by Kant himself, and that the apparent abstraction hides a process which is really, if we may use the term, one of *concretion,* or one by which the abstraction of our first mode of thought is corrected. This is a very important point; for an understanding of it will enable us to see just how far Kant reached a true idea of criticism, and how far his view requires to be modified in order to correspond to such a true idea.

Criticism possible only from a point of view less abstract than that which is criticised.

A point of view from which criticism is possible cannot be one reached by mere abstraction. For abstraction does not give us any universal which can cast a new light upon the particulars; it cannot raise us to any point of view really higher than that which we have previously reached

in our determination of the particulars. It simply empties our ideas of their content, without really increasing their extension. It is only in so far as the process of abstraction, while it lifts us beyond the sphere of an opposition which seemed absolute, brings into view a principle of unity which was hidden beneath the difference of its terms, that it can enable us to criticise our former conceptions. Now, it is just this point that Kant seems to lose sight of in his first attempt to criticise the way in which we represent the world in time and space. In that representation he finds an antinomy between the requirements of conception and the possibilities of perception. And his first solution of the antinomy is simply to abstract from the latter and assert the former as absolute. But almost unconsciously he is driven by the immanent dialectic of his thought to recognise, what he afterwards stated explicitly in the *Critique,* that if perception without conception is blind, conception without perception is empty. Hence, in separating conception from perception he has reached no higher point of view, from which he can criticise the ordinary empirical unity of the two. He is, therefore, forced to take refuge in a still higher abstraction, which, however, *as a mere abstraction,* cannot really supply him with any better point of view for criticism. On the contrary, as it is an abstraction not only from perception but also from conception, it necessarily vanishes into a pure identity, which is unthinkable as well as unimaginable. Kant's apparent process of abstraction, however, really has its value just in this, that it involves more than it expresses. For while the attempt to sever conception from perception shows that though opposed they cannot be separated, or that their opposition is merely relative, it *reveals that there is an intelligible unity on which criticism can take its stand, and in reference to which it can test our first imperfect view of things, and overcome the antagonism involved in it.* Or, to put the same thing in a different way, it shows that the view of the world which gave rise to the difficulties and antinomies in question was based on an abstraction; and that when we restore the element abstracted from, these difficulties and antinomies are capable of solution.

How, consequently, the relativity of object to the subject must be understood.

This may be expressed more simply by saying that the real source of the difficulties which perplexed Kant's mind lay in the fact that the world in time and space was taken as a thing in itself, which existed without reference to the thinking subject; and that the solution of them lay in the discovery that that world is phenomenal and not noumenal, *i.e.*, that it cannot be conceived except as existing for a self. In saying this, however, it is to be observed that we are giving a sense to the contrast of phenomenal and noumenal which is not recognised by Kant, or which we can find in Kant only when, according to the reasoning of the last paragraph, we make explicit what rather lies behind his thought than is directly contained in it. To Kant the noumenon was, in the first instance, the thing without relation to our perception of it, the thing as it is to pure conception. In the second instance, when the modes of conception also were condemned as in themselves empty and, therefore, as deriving their whole value from their application to some kind of perception, the noumenon ceased for him to be the object of conception, and became simply the object of an intuitive understanding. But this idea, as it was reached in Kant by abstraction both from conception and from perception, became equivalent to the conception of a thing in itself without reference to any intelligence; or, what is the same thing from this point of view, a thing which is not distinguished from the intelligence for which it is. For it is all the same whether we regard the thing as absolutely repelled from, or as absolutely identified with, the intelligence that apprehends it. In both cases the unity-in-difference of the knowable object and the knowing subject is lost in a pure identity of which nothing can be said. In both cases the real object or noumenon is reduced to the thing as related to nothing but itself, while the phenomenon is the thing as related to the intelligence. On the other hand, if we follow the line of thought above indicated, the opposition of reality to knowledge disappears. And the error of the ordinary view of things is seen to lie in this, that it takes the object as a thing in itself apart from, and unrelated to, the intelligence. It is this error, the error of what we may call a natural abstraction, which

gives rise to all the difficulties and antinomies previously spoken of; for they all originate in the attempt to treat as a *res completa* what is not really a *res completa*. In order, therefore, to solve these antinomies what we require is, first of all, to recognise the abstraction which such an attempt involves, *i.e.*, the abstraction, in our determination of the object, from the consciousness for which it is. From this point of view, it may be said that what we at first take for the thing in itself is a phenomenon or existence for another, *i.e.*, for the self; and that, on the other hand, when we have recognised it to be a phenomenon or existence for another, we have begun to apprehend it as a noumenon, *i.e.*, as what it really is in itself. The recognition that consciousness is a necessary element in all that is for it, and that existence is essentially existence-for-a-self, is at once the discovery that the object of knowledge is phenomenal, and it is the discovery of the noumenon of which it is phenomenal. For to recognise that all existence is existence *for* a self is to adopt a principle, the natural outcome or complement of which is the doctrine that all existence is the manifestation of a self. This, as above said, is in a sense to invert the use of the conceptions of noumenon and phenomenon which we find in Kant; but it will be one of the objects of this book to show that it is in this inversion that we discover the essential meaning of Kant's work.

Differences between the *Dissertation* and the *Critique of Pure Reason*.

The course of the preceding argument is probably already sufficient to show the main motive or inner necessity of the course of thought by which Kant found his way from the ideas of the *Dissertation* to those of the *Critique*. There are two great differences which separate the latter from the former. The first is that in the *Critique* Kant ceases to regard the *a priori* conceptions of the mind as determinations of things in themselves, and regards them only as forms by which the data of sense under the forms of sense are determined as phenomena or objects of experience. The second, which is a necessary consequence of this, is that, while in the *Dissertation* these conceptions are regarded as expressing the ways in which God, as the first cause of the existence of all finite substances, also unites them into one world of which all parts are *in mutuo*

commercio; in the *Critique* they are regarded as categories by which the conscious self combines all the data of sense in relation to itself into one experience. A few words of explanation in regard to each of these points will enable us to bring clearly before us the whole motive of the transition.

1772—Kant's new difficulty as to the pure conceptions. How can they be objectively valid?

1. We have already seen how natural was the course of thought by which Kant was led to give up his first view that the *a priori* conceptions of the mind reveal to us the ultimate reality of things. We have seen that even in the *Dissertation* itself this transition is already made, in effect if not explicitly, when Kant speaks of the ultimate reality as the object, not of our understanding, but of a perceptive or intuitive understanding. For, as an intuitive understanding is one for which the division of conception and perception does not exist, this already implies that *a priori* conceptions have value only in relation to perceptions given independently of them, and in our case, therefore, only in reference to perceptions given under the forms of space and time. This thought, however, did not distinctly suggest itself till some time after the *Dissertation* was written, and according to Kant's own statement, it arose in his mind in connexion with the recollection of Hume's argument in relation to causality. The first step in this direction, however, seems to have been due to the development of Kant's own thought, as appears from a letter to Herz, the date of which is 21st February, 1772, about two years after the *Dissertation*. In that letter he announces that he has had before him for some time the plan of a work to be called *The Limits of Sense and Reason*, but that in attempting to write it, he had discovered that in all his own previous metaphysical investigations, as well as in those of others, an essential element was wanting,—an element which, if discovered, would supply the key to the whole secret of metaphysic. "For," he goes on, "I put this question to myself, On what ground rests the relation of that in us which we call an idea to objects? If all that the idea contains is simply the mode in which the subject is affected by an object, we may easily understand how it should correspond to that object as an effect to its cause, and how, therefore,

the determination of our mind should be capable of giving us an idea *of* something, or in other words, how it should be possible for an idea of our mind to have an object. Thus it is intelligible how our ideas, so far as they are sensuous affections passively received, should have a relation to objects, and also how the forms of sense, though borrowed from the nature of our soul, should nevertheless apply to all things in so far as they are presented in sense. On the other hand, if that in us which is called an idea, were in relation to the object an activity, that is to say, if the object itself were produced by the idea, (as it is supposed that the ideas in the Divine Mind are the archetypes of things,) then, in this way also, the conformity of ideas with objects might be understood. We can thus discern at least the *possibility* of two kinds of intelligence; of an *intellectus archetypus*, whose perception itself should be the ground for the existence of things, and of an *intellectus ectypus*, which should derive all the data of its thinking from the impressions of sense. But our intelligence does not fall under either description. It is not, if we leave moral ends out of account, the cause of the objects it apprehends, nor are these objects the causes of its conceptions (*in sensu reali*). Thus the pure conceptions of the understanding cannot be abstracted from the feelings of sense, nor are they merely the expression of the character of our sensitive receptivity. They have their sources, indeed, in the nature of the soul, but they are neither the result of the action of the object upon it nor do they produce the object. In my *Dissertation*, I was content to explain their nature in a negative way, and to say only that they are not modifications of the soul produced by the object. But now I must ask in what *other* way an idea is possible, which refers to an object, without being the effect of an impression from that object? I ventured in the *Dissertation* to say, that the ideas of sense represent things as they *appear*, while the conceptions of the understanding represent things as they *are*. But how can the ideas of these things be given to us, if not by the manner in which they affect us? Or, if the pure conceptions of them are due to our own inner activity, whence comes the agreement which they are supposed to have

with objects, which yet are not their products? How can pure reason lay down axioms about things without any experience of them? In Mathematics, the difficulty is not great, because objects are only capable of being, or being represented as, *quantities,* in so far as we produce the idea of them by repeating a unit for a number of times. The mind is active in generating the conception of quantity, and, therefore, we can see how the principles of quantity should be determined *a priori;* but when we ask how the understanding, by a pure *a priori* process, can form to itself conceptions of things in their *qualitative* determination, *or lay down real principles as to their possibility, principles which are not derived from experience, but to which experience must exactly conform,*—we ask a question over which the greatest obscurity has hitherto rested."

Dogmatic solutions of the difficulty.

"Plato assumed a prenatal, Malebranche a present, intuition of the Divine Being, as the source of the pure notions and principles of the understanding; and various moralists have adopted a similar hypothesis to account for our primary ideas of moral law. Crusius, on the other hand, spoke of certain rules of judgment and certain conceptions, which God has implanted in the human soul in exact conformity with the constitution of things. The former writers, therefore, based their systems on a *supernatural influence,* the latter on an intellectual pre-established harmony. But such a *Deus ex machina* is the most extravagant resource to which a philosopher can betake himself in explaining the origin and value of our knowledge: for it not only involves a palpable case of reasoning in a circle, but also stimulates and encourages all the whims of pious fancy and all the dreams of baseless speculation." [1]

Kant's first attempt to draw up a list of the categories.

"While in this way I was searching out the sources of intellectual knowledge, without which we cannot determine the nature and limits of Metaphysic, I succeeded in making a distinct division of the parts of this science; and I sought further to gather Transcendental Philosophy, or, in other words, all the notions of pure understanding into a certain

[1] An allusion to his own comparison of the metaphysic of Leibniz to the dreams of Swedenborg.

number of Categories. Nor did I follow the manner of Aristotle, who simply set them down one after another as they occurred to him in his ten Predicaments, but I aimed at a systematic classification, determined by a few fundamental principles. Without, however, going into any further detail, I may say that the essential part of my task is now done, and that I am in a position to lay before the public a *Criticism of Pure Reason*, which explains the nature of truth, both theoretical and practical, in so far as it is derived purely from the intelligence: and I expect to complete and publish the first part of this system, containing an account of the sources of Metaphysic, its methods and its limits, within about three months."

Question of the objective validity of the pure conceptions.

In this passage Kant draws attention to a defect of the pure conceptions, which is substantially identical with that which he had already detected in the *Dissertation*. For there he had observed that these conceptions are general, and that they can be particularised and individualised only by the aid of perceptions drawn from sense; and this had led him to set up the idea of an intuitive understanding as that which alone apprehends objects as they are. Here, in like manner, he points out that pure conceptions as such, are subjective, and that they cannot be determined as objective, unless objects are given which can be brought under them; and, further, that this difficulty would not exist if our understanding were intuitive and therefore creative; for then there would be no division between the general conception and the particulars to be subsumed under it. In other words, the distinction of perception and conception made in the *Dissertation*, necessarily gives rise to a difficulty as to their combination, a difficulty which now requires to be dealt with. In the *Dissertation*, that difficulty had not clearly emerged for two reasons; first, because Kant was too much occupied with establishing the *distinction* of perception and the forms of perception from conception and its forms, to pay much attention to their *relation*: secondly, because he had not yet clearly seen that the pure conceptions can find their realisation or objective meaning only in their application to the perceptions of sense. Nay, he had there spoken of them as determining

things in themselves, though he had implicitly retracted this view by setting up the ideal of an intuitive understanding. At the time of the letter to Herz, however, this new aspect of the case had dawned upon him, and had brought with it the great problem of the *Critique,* how conceptions, which are not due to experience, should yet be conceptions to which experience must conform.[1]

Distinction and relation of perception and conception in the *Critique.*

Now, it may be observed by anticipation that the *Critique* from beginning to end keeps its way between what we may call two opposite poles of thought, never losing sight of either, though the attempt to steer by both often brings it into real or apparent contradiction with itself. In the first place, the *Critique* holds by the thought of the *Dissertation* that conception and perception, understanding and sense, are essentially disparate, and that indeed in their union they necessarily give rise to certain antinomies, which we can solve only by pointing out their source. In the second place, it holds with equal firmness by the thought that experience, *i.e.,* all the knowledge of objects that we possess, is based upon this very union of perception with conception, or upon the determination of the former by the latter. Experience is thus the combination of two elements which can never be resolved into one, two elements for the differences of which we can never find a principle of unity. It is the necessary synthesis of essentially heterogeneous factors, which imply and demand each other as factors of experience, but which, nevertheless, when brought together, repel each other and will not be fused into a perfect unity. In the end, therefore, when it is carried out to its ultimate results, the combination breaks down, and its disparate elements give rise to antinomies; which, however, do not cast doubt on experience, but only show that the knowledge it gives us is a knowledge of phenomena and not of things in themselves. For, in contrast with this empirical union of disparate elements, thought, which seeks unity in experience and cannot find it, necessarily falls back upon an idea derived from itself, in which it cannot but recognise the necessary characteristics of the ultimate reality. This idea is that which we have already spoken of as the idea

[1] Observe the sentence italicised in the letter to Herz.

of intuitive understanding, or of its object, viz., the thing in itself or noumenon. It is for Kant, as we have seen, the ultimate abstraction, which we reach by negation of conception in its difference from perception, as well as of perception in its difference from conception. Whether this view of it can be maintained, or whether, as we have already hinted, there is another principle which really guides Kant's thought though it may not be consciously present to himself, we need not here discuss. It is, however, necessary so far to anticipate what follows as to mention that, in Kant's view, the assurance which we have that the idea of reason, the idea of the noumenon, is or represents the ultimate truth of things, is due not to the speculative, but to the practical, reason.

Kant does not yet speak of the *limitation* of the categories to experience.

In the letter to Herz quoted above, the general line of investigation, upon which Kant had entered and which was to terminate only in the *Critique*, is clearly indicated. The great question for him was to explain how pure conceptions can have an objective meaning, and especially how they can have an objective meaning in relation to objects given in experience through sense. How, he asks, "can my understanding produce real principles as to the possibility of things with which experience must agree, though they are independent of experience"? Kant as yet says nothing directly as to the limitation of these principles to experience or, in other words, to phenomena given through sense, and we have evidence that for some time after the letter to Herz this limitation was not recognised by Kant.[1] In fact, this limitation could not become clear to him till he had advanced some way towards his subsequent deduction of the categories. For it was the perception that *a priori* synthesis is possible only through the determination of the forms of sense by the unity of thought as expressed in the categories, which enabled Kant at once to vindicate the *a priori* principles as principles of experience and to limit them to experience.

When did Hume break Kant's 'dogmatic slumbers'?

Now how was this step rendered possible? The answer to this question will become easier, if we first ask ourselves

[1] Cf. Dr. B. Erdmann's remarks in the *Phil. Monatsheft*, XIX. 141 *seq.*, and the quotations there given from Politz's edition of Kant's lectures on Metaphysic. Cf. also *Phil. Monatsheft*, XX. 89 *seq.*

another question, viz., what was the point at which Kant received that decisive influence from Hume, of which he so often speaks? [1] Let us look first at what we may call the *locus classicus* on this subject:—

"I confess it freely," he declares in the introduction to the *Prolegomena,* "the remembrance of David Hume was the first thing which many years ago interrupted my dogmatic slumber, and gave to my investigations in the field of speculative philosophy a quite new direction. I was far, indeed, from following him in the inferences which he drew, and which were so drawn by him just because he did not take the problem he had to deal with in all its generality, but only stumbled upon one aspect of it, which without reference to the whole could give him no secure basis of reasoning. Now, when we start with a thought that another has bequeathed to us, a thought well-grounded but not fully developed, we may have good hope by persevering reflexion to get further with it than the acute writer to whom we owe the first spark of light. I, therefore, set myself to inquire whether Hume's objections admitted of being universalised; and I was not long in finding that the conception of the connexion of cause and effect is by no means the only one under which the understanding represents to itself *a priori* the connexions of objects, but that on the contrary, all metaphysic consists of such connexions. I sought, therefore, to assure myself of their number, and when I had succeeded to my wish in doing this, *i.e.,* when I had succeeded in determining them all from one single principle, I then proceeded to the *deduction* of them," *i.e.,* to the justification of their use in relation to objects; "for I had already assured myself that they were not, as Hume suspected, derived from experience but that they had sprung from the pure understanding itself. This deduction, which had appeared impossible to my acute predecessor, and the very idea of which had never occurred to any one else,—though every one confidently employed the conceptions in question

[1] The view that it was at this period that the influence of Hume upon Kant is to be dated, is maintained with great force by Dr. B. Erdmann in his introduction to the *Prolegomena* and again in a recent article in the *Archiv für Philosophie.*

without once asking for the grounds of their objective validity,—this deduction, I say, was the most difficult task that could ever be undertaken for the behoof of metaphysic. And what made it still harder was, that the metaphysic already in existence could not give me the slightest help, since my aim was nothing less than for the first time to determine the possibility of metaphysic. Now, when I had succeeded in solving Hume's problem, not only in a single case, but in relation to the whole faculty of pure reason, I could proceed to take secure, though as yet but slow steps towards what was my ultimate end, viz., the complete determination, according to universal principles, of the whole compass of pure reason in its limits as well as in its content: which was all that metaphysic stood in need of in order to develop its system on a safe and certain plan."

Hume's discussion of the idea of causality.

In this passage Kant tells us that the "remembrance" of David Hume broke his dogmatic slumbers by suggesting a thought, the sceptical consequences of which, as drawn by Hume himself, he at once rejected. At the same time, in rejecting those consequences, he generalised the objection from which they flowed, and was therefore obliged to find a general answer to it. He was thus led into a line of inquiry, the result of which was to discover the list of *a priori* conceptions, and at once to vindicate their objective validity and to limit it to experience. Now if we turn to Hume's *Essays*,[1] (the only work of his with which Kant was acquainted,) we find that Hume starts with the "proposition, which will not admit of much dispute, that all our ideas are nothing but copies of our impressions, or, in other words, that it is impossible for us to *think* of anything, which we have not antecedently *felt* either by our external or internal senses." But, he goes on to argue, there is nothing in the data of inner or outer sense which suggests the idea of a necessary connexion between the particular phenomena which we regard as causes and effects of each other. As regards outer experience, "solidity, extension, motion, these qualities are all complete in themselves and never point

[1] Hume's *Essays*, edited by Green and Grose, II. 50 *seq.*: Inquiry concerning the Human Understanding, § 7.

to any other event which may result from them." "We know that as a fact, heat is a constant attendant of flame: but what is the connexion between them, we have no room so much as to conjecture or imagine." And as regards inner experience, the case is not different. "Were we empowered by a secret wish to remove mountains or to control the planets in their orbit, this power would not be more extraordinary or beyond our comprehension," than the fact that by our will we can move our limbs. Hence there is nothing in the first experience of any phenomenon to lead us to expect that it should have a particular consequent; and the experience that it actually has such a consequent is not an "impression," from which the idea of necessary connexion can be derived. The only thing from which we can derive that idea is the "new sentiment," which arises in consequence of the frequent repetition of cases "in which the same object is followed by the same event," *i.e.*, "the customary connexion in thought between an object and its usual attendant."

Kant's representation of Hume's argument.

Now, in the last chapter I pointed out that in all this Hume is not arguing against the idea of a synthetic power of thought; for he excludes that idea at the outset by the reduction of ideas to copies of impressions. He speaks, indeed, of the relation of causes and effects as incomprehensible—in conformity with his general view of experience as consisting of isolated impressions, which have no relations except the external relations of time and space. But his object is, not to bring arguments against the doctrine that the intelligence possesses a synthetic power, but simply to show that in the impressions as given there is no hint or suggestion of "power or necessary connexion." When, however, we turn to Kant's words, we find that he connects these two ideas and reads Hume as if he were arguing against the idea of an *a priori* synthetic power of thought. "Hume," he declares, "started from a single but very important conception of metaphysic, the conception of the connexion of cause and effect, and he required reason, which pretends to have produced that conception in its own bosom, to submit to question. He demanded, in short, that reason should be forced explicitly to state what justification it has for thinking that anything

can be so constituted, that, if *it* is posited, something else must necessarily be posited in consequence: for that is what is expressed in the conception of cause. He thus proved beyond contradiction that it is quite impossible for reason, *a priori* and out of conceptions, to establish such a connexion, a connexion which involves necessity: for it is quite impossible to understand how, because one thing is, something else must necessarily be, and consequently how the conception of such a connexion can be attained *a priori*. Hence he concluded that reason altogether deceives itself with this idea, falsely regarding it as its own offspring, when it is nothing but a bastard-child of imagination, begotten upon it by experience. For the whole secret is that imagination, having brought certain ideas under the law of association, tries to pass off the subjective necessity arising from such association, *i.e.*, a mere habit of the mind itself, as if it were an objective necessity of thought." [1]

Kant thus reads Hume's argument against the possibility of deriving the idea of necessary connexion from experience, as if it were intended to disprove the existence of a synthetic power in thought: a power which, as belonging to *pure* thought, must establish connexions of ideas which are necessary and universal. Now, as already remarked, Hume did not seek to *prove* that thought is not synthetic; he assumed it to begin with. It is the premise from which he starts, and indeed the presupposition of the whole school of Locke to which he belongs, that thought cannot legitimately add to the data given: and Kant refutes this presupposition only in so far as his transcendental deduction cuts away the ground from Hume's explanation of the origin of the principle of causality, by proving that the particular experiences from which Hume derives that principle could not exist without it. But, in the first instance, Kant's argument is directed not against Hume's *argument* but against his *presupposition* that the mind cannot add to the data given to it; and he sees now, what he did not see when he wrote the *Essay on Negative Quantity*, that it is to add to these data to bring them under the general principle of causality or to

[1] *Prolegomena*, Introduction.

assert that that principle has objective validity. Hume awakened Kant from his dogmatic slumbers by making him realise that the objective application of the conceptions of pure understanding, the possibility of which is the problem of the letter to Herz, involves a synthesis which, as *a priori,* must be universal and necessary, and cannot therefore find its evidence in the particular experiences which fall under it. But, when this difficulty was suggested, the point which by his own mental history Kant was led first of all to consider was not,—what Hume sought to prove,—the impossibility of deriving *necessary* principles of synthesis from experience, but the difficulty of conceiving how pure thought could become synthetic in relation to experience. For, up to the year 1766 at least, Kant had been endeavouring, in opposition to the philosophy of Wolff, to exhibit the difference between the synthetic connexion of reality and the analytic process of thought. And though in the *Dissertation,* he had maintained that the intelligence brings with it not only formal but also real principles of knowledge, yet the question of the application of these principles to the data of sense had not yet suggested itself. Now, however, Kant is forced to consider this question, and the result is that he recurs to the doctrine of his earlier essays that thought is in itself analytic, but at the same time maintains that it becomes synthetic in relation to the forms and matter of sense. And by a natural illusion he regards Hume as discussing the whole problem thus suggested. Hence Kant seems to connect the name of Hume with a question which really arose out of the Wolffian philosophy—the question of the possibility of a *synthesis* of pure thought; and not merely with the problem which Hume really considered—the problem of the possibility of extracting *necessary* principles out of experience: the necessity and universality of the principles in question being for Kant a consequence of the *a priori* character of the synthesis. It is, however, the transcendental deduction, in which the *a priori* principles are shown to be presupposed in experience and not derived from it, which alone contains Kant's direct answer to the argument of Hume's *Essays;* while his explanation of the way in

which thought becomes capable of an ampliative or synthetic movement is really an answer to a question which had been suggested, not by Hume but by the Wolffian philosophy.[1]

Kant's search for a systematic list of the categories.

Passing, however, from the question, as to the exact relation of Kant's thought to that of Hume, we can see that from the point he had reached, there were two special problems which opened up before him. On the one hand, he had to consider how, consistently with its essential nature, pure thought could become synthetic in relation to experience; and on the other hand, he had to show how experience, consistently with *its* essential nature, could be proved to conform to the principles thus developed. As a first step towards the solution of the former of these problems, Kant sought to make a complete list of the *a priori* principles, or rather of the pure conceptions underlying them. He, therefore, looked about for some principle which should not only furnish a criterion of such conceptions, but which should guide him to the discovery of them and enable him to make sure that the list so discovered was complete. Now, the reference to Aristotle in the letter to Herz shows where he first looked for guidance, and this idea is confirmed by what he says in the *Prolegomena*.[2] As he there tells us, he took Aristotle's list of categories for an attempt to realise what he wanted, and in the light of his own doctrine as to time and space, he was able at once to cast aside three of the categories contained in the list—*ubi, quando,* and *situs*. But even as thus purified, the list was of no use to him, for he found in it "no principle according to which the understanding could be measured out, and all the functions out of which its pure conceptions arise could be precisely and completely determined." He then goes on to say that "in order to find such a principle, he looked for an

[1] It may be said to be an answer to Hume in so far as Kant substitutes an *a priori* synthesis for the analysis of ideas derived from experience. But when Kant says that Hume "required reason, which pretended to have produced that conception," *i.e.*, the conception of causality, "in its own bosom, to submit to question," he is not stating the problem as Hume would have stated it, but as he himself was led to state it by his previous criticism of the Wolffian philosophy.

[2] *Prolegomena*, § 39.

act of the understanding, which contains all its other acts, and which differentiates itself into a series of different acts only in virtue of the different modifications or moments of the process, whereby the manifold which is before the mind is brought under the unity of thought." This act he found to be the act of judging. But in the analysis of judgment, which was thus determined to be the essential activity of the understanding, he had before him for his guidance the work which was already done by the Logicians, a work "perhaps not without defects, but sufficiently accurate to enable him, on the basis of it, to set forth a complete table of the pure functions of the understanding." These functions, however, as treated by formal Logic, were without any determination in relation to objects, and he, therefore, proceeded "to refer the functions for judgment to objects in general, or rather to the conditions under which judgments are determined as objectively valid"; and this supplied him with the required catalogue of the conceptions of the mind, a catalogue of which "he could be certain that it contained all the elements of our knowledge of things which are derived from the pure understanding, no more and no less." The result of this method of discovery of the categories was to determine for him at the same time their true meaning and validity; for it showed that "in themselves they are mere logical functions involving no conception of any object whatsoever," and that they get objective significance only through the sense-perceptions, to which they are applied and in application to which they serve only to "give universal validity to empirical judgments, which in themselves are undetermined in view of all the functions for judgment."[1] Kant goes on further to say that the effect of this systematic process was, in the first place, "to furnish a systematic method, on which every object of pure reason could be treated;" and, in the second place, to separate from the categories two other classes of conceptions," which were apt to be confounded with them, viz., the "reflective conceptions," and, what is more

[1] This, of course, refers to the distinction made in the *Prolegomena* between judgments of perception and judgments of experience,—a distinction which will be criticised in the sequel.

important, the Ideas of reason, for which a quite different source has to be sought.

Derivation of such a list from the logical analysis of Judgment.

It appears, then, that the inquiries out of which the *Critique* arose proceeded on this fashion. The separation of the pure conceptions of the mind from perceptions and especially from the forms of perception, which was accomplished in the *Dissertation,* led, so soon as it was seen that the conceptions could have objective validity only as applied to those very perceptions from which they were so distinguished, to an inquiry into the possibility and the conditions of this application. This inquiry, however, in Kant's view, could be satisfactorily carried on only after a complete list of the pure conceptions, based upon the nature of the synthetic activity which they subserve, had been discovered. Now, that activity must be conceived as a process in which thought goes beyond itself, beyond its own pure analytic unity, to unite with itself something not already combined in that unity. In other words, it is a process of *judgment,* in which different data of sense are brought together under one conception and so united with the consciousness of self. And in the last resort the understanding itself must provide the conceptions by which it gives unity to such differences. Hence, if there are pure *a priori* conceptions which the mind derives from itself and by the aid of which it unites empirical elements with each other and with itself, they must be involved in, and constitutive of, the activity of judging. They can, in short, only be different " moments " or aspects which become distinguishable in the unity of the understanding when we consider it in this its essential and characteristic activity. But judgment had been thoroughly examined by the Logicians, who had dealt with it as a purely formal process of analysing ideas, and in this view of it had shown it to have certain aspects, summed up under the heads of *quantity, quality, relation,* and *modality,* with their subordinate species. This result, then, Kant took for granted, and with some slight modifications he treated it as supplying a complete table of logical functions. The list of logical functions again, when judgment was regarded not as a merely formal process of analysing ideas but as a process of determining

objects, translated itself into a list of categories or conceptions of objects in general, which was just the list of pure conceptions Kant required. He could, therefore, now proceed with his great task, the task of proving that we have a right to apply these general conceptions to the objects of sense; or, to speak more accurately, to the appearances of sense, which, as thus subsumed under the categories, are determined as the objects of experience.

Substitution of the self for God as the principle of unity in knowledge.

2. There are some very important results which may be drawn from this account of the process whereby Kant arrived at his list of categories; but before attempting to state them, it seems desirable to look at the other aspect of the transition from the *Dissertation* to the *Critique* to which reference has been made. In the *Dissertation,* the pure conceptions are regarded as ways in which God predetermines all the finite and contingent substances with a view to their combination into one world, all parts of which are *in mutuo commercio*: while in the *Critique,* they are regarded as categories by which the conscious self combines the data of sense in relation to itself into one experience. In the *Dissertation,* the objective connexion of substances as acting and reacting on each other in one world is supposed to translate itself,—by reason of the forms of sense through which the world is given to us in experience,—into the subjective appearance of their existence as in space and time; and thus the unity of all things in their dependence on God, appears to us as their existence in one space (*Omnipraesentia Phaenomenon*): and the reciprocal determination of their contingent existence through such dependence, as their existence in one time (*Aeternitas Phaenomenon*). Finally, if we ask for a ground for this belief in the coincidence or parallelism of our subjective representation of the world as one world in space and time, with the objective reality, Kant's answer is that we must fall back on the idea that we, like all other finite substances, are dependent on one absolute substance, whose unity makes the world one, or maintains all finite substances in such relations, that they can influence each other: and that, therefore, our perception of them which is dependent on such external influence,

presupposes and conforms to our conception of them which is not so dependent.

The dogmatic explanation of knowledge.

This part of Kant's speculations is, as he indicates in writing to Lambert, imperfectly developed in the *Dissertation*; but it supplies the link which is needful to enable us to connect his earlier and later speculations, and indirectly to connect the earlier dogmatic philosophies of Spinoza, Leibniz, and Wolff with the Criticism which Kant substituted for it. As Kant at a later date said, the essential change from dogmatism to criticism was like the change from the Ptolemaic to the Copernican system. Just as Copernicus taught Astronomy to refer many of the apparent movements of the heavens to the real movement of the earth on which the spectator is placed, so criticism taught philosophy to regard the objective world from the point of view of our connexion with it, and to attribute the general characteristics of that world, as it exists for consciousness, to the essential nature of our consciousness itself. From this point of view the question how all objects are combined into the unity of one world, turns into the question how that world comes to be such a unity *for me*. Now, while the former question might be answered by a reference to the unity of God, on whom all finite existences alike depend, and who therefore conditions their reciprocal influence; the latter was left, according to the principles of dogmatic philosophy, to be answered by the theories of a pre-established harmony, or of a continuous supernatural interference. Kant, however, who had already explained the coincidence of things, as we *perceive* them, with the *a priori* determinations of space and time, by showing that time and space are the forms under which alone we can perceive, was soon forced to find the explanation also of the connexion of things as we *think* them under the pure principles of the understanding, in a subjective necessity of the understanding itself. Whenever this idea had been suggested, it became clear that the unity of the world, as determined by its dependence on one absolute principle, will not of itself explain the unity of our knowledge of it. On the other hand, the unity of our intelligence with itself *will* explain the necessary unity and interconnexion in its parts

of any world that exists for our intelligence. In other words, if we take for granted the fact of knowledge and the existence of a world which is an object of knowledge, we see that that world cannot but conform to the conditions under which alone it can become known: in other words, nothing can be determined by the intelligence as an object that does not conform to conditions under which alone it can become such an object. Hence we do not need to say that the object in itself is in pre-established harmony with the mind, or the mind with the object in itself,—an assertion which contradicts itself by breaking through the very limits of knowledge which it at the same time sets up,—but we can say that the known objects as such, must conform to the conditions of knowledge, and that the knowable object, as such, must be in pre-established harmony, if we like so to express it, with these conditions.

Critical explanation of it.

When we have got so far, it begins to be clear that for the unity which was before found in God, as an objective principle, we must substitute the unity of the self. If the world is one world for us, it is not because it is one independently of the action of our intelligence and solely in virtue of the unity of its divine cause; but because it cannot exist for us or be known by us, except so far as it is brought in relation to one self. Formerly, Kant had said that the finite substances are *in mutuo commercio* and constitute one world, because, and only because, they are all equally dependent on the one absolute substance. Now he must say that they are necessarily represented as acting and reacting on each other and so constituting one world, only because they are all objects of one conscious self, and must therefore conform to the conditions of the unity of self-consciousness. There is here a complete shifting of the centre to which all is referred, but in other respects all that was previously said of being has now to be said of knowing. Hence all the pure conceptions, and especially the conceptions of substance, causality, and reciprocity,—by which in the *Dissertation* the world was determined as a whole of parts essentially interrelated which in all its changes maintains its identity and its unity,—cease to be regarded as representing objective relations of things in themselves and

are taken as relations of phenomena or things as existing for us. Instead of being treated as principles of relation by which objects are united into one real world in dependence on one absolute Being, they are now represented as necessary relations by which all objects must be determined, if they are to be united as a known world in one consciousness, *i.e.*, in the consciousness of one self. The dogmatic presuppositions of the unity of the world and of the interconnexion of its parts thus become vitalised, the former being identified with the unity of intelligence and the latter with the special functions of thought in which that unity expresses itself. Thus the world of things in themselves outside of consciousness is abandoned as the unknown and the unknowable: and the whole interest of knowledge is concentrated on the process within consciousness, by which the data presented to the mind in sense are combined and determined as the elements of one experience. The pure intelligence by its *a priori* conceptions is still conceived as giving objective determination to the data of sense, which are regarded as in themselves merely subjective states bound together, at best only in a subjective unity of apprehension. But this contrast of subjective and objective has changed its meaning; for it now means that it is only as the self brings the data of its perception under the forms of its conception, that it can have consciousness of an objective world as such, or can determine its subjective perceptions as perceptions of a world of objects.

Objection to the dogmatic view.

It is most important for the understanding of the *Critique* that we should keep in mind this Copernican change of the centre from which the intelligible world is regarded, and in relation to which its varying aspects are explained. But in order that we may do justice to previous philosophies, it is also important that we should understand at once the value and the limit of the alteration which it involves. Previous philosophy had taken its stand on the Absolute. It had assumed that we are able to place ourselves at the objective centre from which all things are seen as they are, in the relations which they really hold to each other. Thus Spinoza had maintained that science, the *scientia intuitiva* which alone deserves

the name of knowledge, necessarily requires us to start with that idea on which all others depend and to deduce all other ideas from it; and in his *Ethics* he had attempted to realise this conception by placing the definition of God at the beginning of his treatise, and making it the basis of everything else. But he had not sufficiently explained how the consciousness of man, which according to him is a mode of one of the attributes, should be able to reach this beginning, *i.e.*, to rise to the apprehension, not only of the attribute of which it is a mode, but even of the substance, which is beyond the special determinations of the attributes and which embraces them all. And though Leibniz had made this less unintelligible by treating the individual as a microcosm, or by bestowing on the self-conscious monad the exceptional gift of a consciousness of God and of general truth, (thus in spite of his own principles putting a qualitative difference between the self-conscious monad and the other monads,) he had by such expedients rather indicated than solved the difficulty. The idea of a "pre-established harmony" shows that its author was conscious that the division between knowing and being was still for him an absolute division, even at the very moment when he was claiming the right to overpass it. For if the self-conscious being had been conceived by him as able to rise to the unity of being and knowing in God, he would no longer have needed to bring in the thought of a harmony to bridge over the division. Kant, therefore, seemed to be saying no more than was strictly justifiable, when he condemned all these theories as involving the introduction of a *Deus ex machina,* and maintained that, besides involving the fallacy of reasoning in a circle, such ways of explaining the origin of knowledge, "stimulate and encourage all the whims of pious fancy and all the dreams of baseless speculation."

Element of truth in the dogmatic view.

At the same time, while we recognise all this, and while we admit that such theories are inconsistent with themselves in taking their stand at a universal point of view, which yet their account of man's intelligence does not justify, we must remember that no criticism of our knowledge is possible which does not involve that in some way we can reach beyond the defect which we criticise.

If we recognise the relativity of knowledge, it must be in reference to some standard which is not itself regarded as relative; if we say that we know only phenomena, it must be in reference to some consciousness of a noumenon which we still possess. The assumption, if we can call it an assumption, that we in some sense know what reality is, is implied even in the extremest assertion of the limits of knowledge. The consciousness that at some point thinking and being meet together and coalesce in one, is necessarily involved even in the most dualistic view of their relations. We must take our stand on something beyond the limit to discover that there is a limit. In this sense, then, the theories which Kant was criticising contain a principle, which cannot be regarded as merely dogmatic except from the point of view of absolute scepticism. For it is impossible that the individual should be confined to the mere phenomena of his own consciousness, and that at the same time he should be able to recognise that he is so confined. Such a recognition involves already that there is for him some point of view beyond the limit which he asserts. The error of those theories, against which Kant had a right to protest, was not that they took their stand at a point of view which is beyond the opposition of subjective and objective, or that they started from the idea of God, but rather that they took the idea of God as purely objective and distinct from the consciousness of self; or, in other words, that they failed to recognise that in self-consciousness there is contained not merely the consciousness of the subject as opposed to the object, but also the consciousness of a unity which, while it involves that opposition, at the same time transcends it. In other words, they did not recognise that in the consciousness of self is involved also the consciousness of the universal unity or centre which all knowledge implies, and that in this sense, the consciousness of self and the consciousness of God are essentially bound up with each other. While, therefore, we are prepared to admit that they were in error, in so far as they did not see that all objects are phenomenal, *i.e.*, that they are not things in themselves independent of consciousness, we are not prepared to recognise that the ultimate reality consists in

such things: for this would imply that the absolute reality is that which has no relation to consciousness. Nor are we prepared to admit that it is a defect of our knowledge, that we cannot apprehend such things. On the contrary, it is in the apprehension of this relation of things to the self that we gain the power at once of criticising our knowledge, in so far as it abstracts from this relation or leaves it out of account; for in detecting the error of this omission we at the same time reach a consciousness of the reality, in opposition to which the former object of our knowledge can be determined as phenomenal.

Kant admits in a sense an ultimate unity of thought and being.

Now, the key to many difficulties of Kant's philosophy is found, when we ask how far he did, and how far he did not, recognise this. I have already indicated in part what the answer must be. Kant does see that there is a point of view beyond the opposition of thought and being, a point at which they fall together; and he sees also that it is because we are able to take our stand at this point of view that we are able to criticise our knowledge. Furthermore, he holds that this point of view is revealed to us in or through the pure consciousness of that self to which all phenomenal objects as such are referred, but to which they are at the same time opposed. For, with this consciousness of self, there comes necessarily the idea of an intuitive understanding, which is not thus opposed to its object, but creates as it apprehends, and apprehends as it creates it. As, however, this idea is reached (or seems to Kant to be reached) by negation and abstraction,—by an abstraction from conception in its distinction from perception, as well as from perception in its distinction from conception,—it shrinks, whenever Kant turns his attention to it, into a bare identity, of which he can say that we "have no conception whatsoever," though we have "a consciousness" of it, and though this consciousness, through the moral law, is ultimately determined to be a consciousness of the absolute reality. How far this view is tenable will be considered hereafter; what we have here to observe is that while, as was indicated in the first chapter of this Introduction, the opposition of critical to dogmatic philosophy depends necessarily on the regress which the former makes upon the presuppositions of the

latter: yet this regress must find a point at which it stops, and from which, as an ultimate point beyond the opposition of being and knowledge, of noumena and phenomena, it is able to discover the errors of the ordinary dualism. It follows, therefore, that while Kant's immediate task is to criticise previous philosophies for confusing thought with reality, yet indirectly and in the end he has also to criticise them for not discovering the true point in which these opposites are united. Unfortunately this point is for him neither an object of conception nor of perception, though it is presupposed in both, and though he assumes that we can so far bring it into consciousness as to take our stand on it for the criticism of both.

Kant's use of formal Logic as a 'guiding thread.'

We are now prepared to take up our deferred examination of the method which Kant used in discovering the list of pure conceptions. Kant extracted these conceptions, as he tells us, from the idea of the judgment, as that was analysed by the Logicians. In order, however, to understand this statement we must have before us two points. In the first place, we must be aware of Kant's confidence in formal Logic, which he had received as a tradition of the schools, and supposed to have come to him unaltered from Aristotle. And, in the second place, we must keep in view the fact that in selecting the analysis of judgment as his starting point, Kant did not forget that judgment is only one of the operations which that Logic analyses, and that it always considers judgment in its relation to conception on the one side, and to syllogism on the other. In other words, he recognised that Logic is a system, and that, if one of its doctrines be used as a principle of discovery, this carries with it a similar use of all the others.

His confidence in formal Logic.

As to the first of these points, we do not need to look far in the *Critique*, to come upon the evidences of Kant's absolute trust in formal Logic, as a sufficient analysis of the process of thought, when that process is treated in itself without reference to its objects. "Logic," he tells us in the preface to the second edition, "already in the earliest times had got into the secure path of science. This may be seen from the fact that since Aristotle, it has never needed to retrace a single step, except perhaps

in getting rid of a few unnecessary subtilties, or in more distinctly defining its subject matter,—improvements which have rather to do with the appropriateness of the form in which the science is taught than with its scientific certitude. It is, moreover, noticeable that it has as little been able to take a single step forward, and seems to all appearance to have been once for all completed and exhausted. Some moderns, indeed, have sought to enlarge it by introducing chapters from Psychology, about the nature of the various faculties exercised in knowledge; or from Metaphysic, about the origin of knowledge and the differences of the certitude of our knowledge of different objects; or from Anthropology, about the causes and cures of prejudice, etc. But in making such additions to it, they have only shown their ignorance of the peculiar character of the science. It is not an extension, it is only a distortion, of the sciences when we let them pass their limits and run into each other; and the limits of Logic are very easily determined. It is the science which completely exhibits and strictly demonstrates the formal rules of all thinking (whether it be *a priori* or empirical, whatever be its origin or object, and whatever accidental or natural hindrances it may meet with in our mental constitution)."

Judgment and Syllogism as a clue to the Categories and the Ideas respectively.

Having this opinion of formal Logic, as a science complete and perfectly secure in its results, a science which has stood the proof of two thousand years without change, Kant can use it as an absolutely certain guide in founding his new Logic, which is to consider not merely the rules for thinking, but the rules for the knowing of objects, so far as that is possible *a priori*. Now thought, as dealt with by formal Logic, starts with the presupposition of a certain given content or idea, which it analyses in judgment into a subject and predicate, and which in syllogism it re-analyses till it finds the ultimate condition of the judgment, *i.e.*, of the assertion which attributes that predicate to that subject. This play of pure thought in itself, or rather (since analytic thought always supposes something to analyse) this play which it carries on without reference to the particular character of the matter in hand, is to be explained as the mere assertion by the conscious

subject of its identity with itself in apprehending such matter. It is the endless 'I am I' of self-consciousness, which it repeats in relation to every content brought within its scope. As the mind is in identity with itself, so every content it receives into its consciousness must be, in like manner, fixed in its self-identity. In judgment, indeed, a division arises between subject and predicate, but this division is stated only to be denied; and if it has not disappeared with this denial, syllogism by a further analysis discovers a middle term by which the difference may finally be brought back to identity.

How the synthetic, is related to the analytic, judgment.

Now, in all this analytic process thought deals with a matter which it has already appropriated, and in dealing with which it never needs to go beyond itself. It is a purely subjective process that has no reference to any object or to any thing but ideas which, as ideas, are already combined with the 'I think.' But how is any matter appropriated by our thought at first? The pure unity of the self produces nothing. Its work is only to distinguish elements which it again reduces to identity, just as in the 'I am I' of self-consciousness it divides the subjective and the objective self only to identify them again. What, however, we have to explain in the new Logic is the mode in which, for the first time, a matter which does *not* already belong to the self is brought into relation to it; or, what is the same thing from the opposite side, the mode in which the pure self goes beyond itself to apprehend that which is not itself. And the only way in which we can do so, is by supposing that, in relation to a given manifold of perception, the pure unity expands into a principle of connexion between the elements of this manifold. It thus, as it were, supplies from itself the predicate for a subject given in perception, and performs an act of judgment in attaching that predicate to it. But this act of judgment is synthetic, not analytic: the intelligence does not get the predicate by analysis from the matter presented to it, but itself evolves it out of its own unity. On this view, therefore, we might say, that the intelligence determines the data of sense as its object by making itself their predicate.

Derivation of the categories.

In this way we can see how it is that Kant looks to the

act of judgment, when he is seeking for the pure *a priori* conceptions. These conceptions spring out of the understanding in the activity of judgment, whereby it applies itself to the matter of perception, or, in other words, whereby it turns the matter of perception into objects of knowledge to itself. Resting in itself thought is a pure identity, but in experience it becomes a principle of synthesis in reference to a given manifold which it appropriates. Its identity is differentiated in reference to a 'manifold' which it thus determines as its object; and, on the other hand, the manifold is integrated in reference to the self of whose consciousness or experience it becomes a part. And the different "moments" or modifications, which this differentiation of thought presents, are to be discovered by considering the different aspects of the formal judgment, *i.e.*, the different aspects in which the unity of the mind shows itself in dealing with a content that has already been brought into unity with it. If we watch what the mind does with a content which it has *already* appropriated, we shall be guided safely to the discovery of that which it does in appropriating a *new* content. Thus it is that Kant justifies his procedure in taking the logical analysis of the formal judgment as a "guiding thread" to the discovery of the pure conceptions of the understanding,—a procedure the results of which we shall consider in detail in a subsequent chapter.

How the synthetic, is related to the analytic, syllogism.

But judgment is "made adequate" in syllogism; *i.e.*, the identity of subject and predicate expressed in a judgment is reduced to its simplest form by bringing to light a middle term which is the principle of unity between the extremes. And this higher "function of unity" must also reappear in the case when the unity has to be established, not between the mind and itself, as already having a special content, but between the mind and the new data which are presented to it through sense. Hence the intelligence cannot be satisfied with the act of judgment in which these data are determined as objects in relation to it, but requires that this act of determination itself should find a mediation. It is obvious, however, that the middle term which is here required cannot be found in pure thought or in the data of sense, but only in something

that contains both, *i.e.*, in a prior act of determination of an object by a conception; and this again points back to a prior act and so on *ad infinitum*.[1] What the mind is seeking, namely, a middle term between itself or its own conceptive activity and the data of sense, can never be found; for, however far we go back, we find still the same dualism. The movement of mind expressed in syllogism can never be completed, because its completion would involve a unity of perception and conception which had no middle term; *i.e.*, an " intellectual intuition." Such an intuition, therefore, is suggested by reason as an unattainable ideal, although it can never be either conceived or perceived. And if there are different forms of syllogism, it is to be supposed that this ideal will present itself in different forms corresponding thereto.

Imperfection of the synthetic judgment, and failure of the synthetic syllogism.

The full development of these ideas must be reserved for the sequel; but enough has been said to show how the logical system of judgment and syllogism, which Kant takes for his guide, may expand into a system of categories and a system of ideas, corresponding respectively to the acts of judging and reasoning in which the mind expresses its unity, when that unity is taken as a principle not of analysis but of synthesis. The point, however, to which I wish here to call attention is that Kant in all this development of his thought remains faithful to the primitive idea expressed in the *Dissertation*. For there, as we saw, the double imperfection, on the one hand, of a perception which is given to the mind and which, therefore, is not one with the conception produced by the mind,—a per-

[1] As showing that the above is a correct analysis of Kant's way of thinking, note what is said (A. 76; B. 101) of the apodictical judgment as contrasted with the assertorial and problematical judgments. "The apodictical judgment involves that the assertorial is determined by the laws of the understanding. It therefore makes an assertion *a priori* and expresses logical necessity. Now as a thing asserted is only gradually incorporated with the understanding, so that we begin by making a problematical judgment regarding it, then accept it assertorially as true, and finally declare it to be inseparably bound up with the understanding, *i.e.*, as necessary and apodictically certain, we may regard these three functions of judgment as so many moments in the process of thought." In this passage we have very clearly expressed that idea of a synthesis *with* the understanding, which is the modal aspect of judgment and which contrasts with the other aspects of it as synthesis *for* the understanding. These aspects, however, are essentially complementary of each other.

ception which is not conception,—and on the other hand, of a conception which is only a general form under which the objects may be brought, but which does not particularise itself or determine itself as an individual object, —a conception which is not perception,—suggested to Kant the idea of a unity in which the dualism is removed. But this unity which is neither perception nor conception, or which is both at once, could not, for that reason, be either conceived or perceived. Kant, therefore, though he speaks of it as a consciousness which is one with the absolute reality, is at the same time obliged to deny that we can ever imagine *what* it is. The method of abstraction by which he reaches it forces him to treat it as a movement of thought, in which, nevertheless, thought never reaches beyond itself : a process of self-determination in which it is forever confined to itself. But this is just the analytic process of thought with which formal Logic deals. Hence we arrive at the conclusion that the ideal of truth or knowledge, which is expressed one way as the intuitive understanding, is in another way the ideal of a purely analytic thought which never moves out of its identity with itself. It is, therefore, only a natural development of the thought of the *Dissertation,* when formal Logic, in its highest expression in the syllogism, is supposed to give rise to an ideal of knowledge which is incapable of being realised, because it represents only the pure identity of thought with itself, irrespective of any matter.

Source of the Kantian opposition of thought and knowledge.

This, however, only brings into more decisive prominence the great difficulty involved in Kant's supposition that the ultimate principle, on which we must take our stand to criticise knowledge, is reached by abstraction from both the elements involved in knowledge. If it be so reached, the ideal act of knowing will have to be conceived as a movement by pure identity, a purely analytic movement, in which all differences of subject and predicate are eliminated; *i.e.,* it will have to be conceived as the formal Logicians conceived the process of thought. The question, however, will immediately recur, whether this supposed analytic movement be not simply *one* aspect of the process of thought, a process which always involves

difference as well as identity; and whether, therefore, it be not a fundamental error to admit that formal Logic exhibits any process of thought which could go on by itself. For, if this be so, then it will become manifest that the criticism, which Kant *seems* to base on the idea of an abstract identity, from which the difference of thought and perception is excluded, is really based on the idea of a unity in which that difference is reduced to a relative one. On this view, the pure analytic or formal Logic will disappear; and the synthetic Logic of experience and science will have to be contrasted, not with it, but with a synthesis of a more perfect kind, in which the perception is not merely subsumed under the conception, but in which both are seen to be essential counterparts of each other. The intuitive or perceptive understanding will thus present itself as an ideal of thought reached, not by abstraction but rather by the opposite process, viz., by bringing before consciousness the unity which underlies the difference of conception and perception, and which manifests itself both in producing that difference and in overcoming it. In such a view of the process of thought, the syllogism will have a meaning, which it has not either in formal Logic or in the synthetic Logic of experience. For, in the former, there is no explanation why the identity should ever have been left behind, and, therefore, no need to return to it; and in the latter, the difference introduced remains permanent and insoluble, and there is no explanation of the fact that we ever desire to solve it. According to the view now suggested, however, we can find a real meaning for syllogism, as the process through which the necessary differentiation of knowledge is brought back to the unity of thought. These, however, are points which we cannot yet fully discuss. For the present, let us sum up the results arrived at in this chapter in relation to the development of Kant's view of criticism.

Summary view of the development of the critical idea.

Criticism necessarily involves a reconsideration of our ideas, *i.e.*, of our conceptions and perceptions of objects, in reference to the faculty of knowledge. With Kant, it begins in a reconsideration of the ideas of time and space, as ideas presupposed in all experience. These ideas are determined as forms of perception, and thus an escape is

found from the difficulties which arise when they are conceived as objective conditions of things. Hence, in the *Dissertation,* things in themselves are regarded as defined by the pure conceptions only. But the pure conceptions are general; they are possible predicates for which a subject must be given; in other words, they are subjective forms which do not prove their own objectivity. And the only matter to be subsumed under these conceptions is the matter of sense given under the forms of space and time. In spite, therefore, of the opposition which has already been shown to exist between the pure conceptions and the perceptions which are given under the forms of time and space, it is only in the latter that the former can be realised, or find individual objects corresponding to them. Thus, in order to show that the pure conceptions have any objective value at all, it becomes necessary to prove that they have application to the form and matter of sense. In this proof, however, the pure conceptions as well as the forms of perception become limited to phenomena. They become characterised as the forms by which the *Ego* determines the appearances of sense as objects for itself. Hence, it is necessary to find some other ground for the contrast of noumena and phenomena than that which was first given. This ground is found in the unity of pure self-consciousness, which, though presupposed in the *a priori* conceptions of the understanding, is already in those conceptions differentiated in relation to the manifold of sense. The pure analytic unity, on which Kant makes his ultimate regress, thus yields him a point of view from which he can criticise that consciousness of objects which constitutes our experience, and oppose to it the idea of a higher knowledge and a higher reality. And this at the same time explains how the empirical consciousness itself is directed and stimulated by an ideal which yet it can never realise, an ideal suggested by the formal unity of thought in its contrast with the synthetic unity of experience. We have, however, only the *idea* of such knowledge and such reality—as Kant, conscious of the defect of the logic of analysis, himself suggests; and this result shows that his criticism rests, not on the basis on which he himself places it, but

on the conception of an intuitive understanding, which shall solve the antagonism that he declares to be insoluble. The fuller exposition of these ideas must be deferred to the sequel: enough has been said to suggest such a view of the *Critique of Pure Reason* as the author might have had in his mind, before he set about the final work of elaborating its different parts.

BOOK I.

THE CRITIQUE OF PURE REASON

CHAPTER I

THE PROBLEM OF THE CRITIQUE OF PURE REASON

THE subject of this chapter has been partly anticipated, but there are some aspects of the problem of Criticism which may be elucidated by a re-statement of it from a somewhat different point of view. Moreover, it is necessary to bring what has been said into closer relation with the language of the *Critique* itself.

Different views of the Problem.

The object which Kant had in view in the Critical Philosophy in general, and especially in the *Critique of Pure Reason,* has been very variously stated by different commentators, according as they have attached more or less importance to particular aspects of it.

To adduce only the most prominent of these differences: it has been maintained that Kant's main object was to prove against Hume that there is an *a priori* knowledge of objects; and it has been maintained that it was to prove against Wolff and Leibniz that knowledge is limited to phenomena. Again, it has been maintained that he was aiming at, and had nearly reached, an Idealism, which involves the negation of all "things in themselves," or the assertion that the self is the only 'thing in itself'; and it has been maintained that all he sought was to fix once for all the opposition between knowledge and reality, to confine sense to an empirical determination of phenomena, and to relegate all noumenal reality to the region

of the unknown and the unknowable. And there can be no doubt that passages may be easily quoted in support of each of these views, seeing that the task of Kant is a very complex one, and what appears as an end from one point of view, or in relation to one part of his philosophy taken by itself, becomes in turn a means when we contemplate that part in its relations to other parts. The different sections of the *Critique* have thus a proximate purpose, different from that which is the aim of the whole treatise; and that treatise gets a different meaning according as we contemplate it as a whole in itself, or as a part of a wider plan which from the first was present to Kant's mind, at least in its main outlines, though for convenience he executed it in a series of successive treatises.

The *Critique of Pure Reason* is part of a larger scheme.

The evidences of this last statement are easy to discover. From the *Critique* itself we learn that in writing it, he was contemplating and preparing the way for his other, and especially his ethical, works; and a letter to Herz dated 7th June, 1771, shows that in his original plan all the investigations which were afterwards spread over the three *Critiques*, were intended to be gathered in one work, under the title of "*The Limits of Sense and Reason.*" That work he proposed to divide into "two parts, one theoretical, and the other practical." The first part was to contain two sections, one corresponding to the *Critique of Pure Reason* and treating of Phenomenology in general; the other treating of Metaphysic, though only as regards its nature and method. The second part was also to contain two sections, one treating of the principles of feeling, of taste and sensuous desire, and the other of the primary rational basis of morality. Now the independent treatment of the different parts of this general plan which Kant subsequently adopted, had the effect of giving an appearance of finality to the results which were arrived at in each of them, though they were really parts of one whole, and were originally conceived as such. This fact, we may notice in passing, has a very important bearing on the controversy as to the agreement or difference of the first and second editions of the *Critique of Pure Reason*. For, as will be shown more fully in the sequel, the alteration of Kant's views which is supposed

to be found in the second edition, is, partly at least, the result of an effort on his part to remove the misconceptions of certain of his readers who had regarded his arguments with reference to their immediate results, and without reference to the further results which he sought to reach through them. These misconceptions Kant sought to meet by bringing in anticipative statements of his ultimate purpose,—statements which sometimes, it must be confessed, have the effect of introducing a new source of confusion into the immediate argument.

The results of the different parts of the *Critique*.

I may best indicate the view taken in this commentary by reference to the two poles of philosophy between which Kant tries to make his way; viz., Dogmatism, of which the main representative is Wolff, and Scepticism, of which the main representative is Hume. If we take the *Aesthetic* by itself, we may view it as directed against Scepticism, in so far as it shows that the determinations of space and time are not discovered by analysis but developed by synthesis, and that they are not pure "relations of ideas" but have objective reality. At the same time, as it proves that this *a priori* synthesis has reference to the forms of sense, it shows that the objective reality in question can be regarded only as phenomenal, and that, therefore, no inference can be drawn from the objective value of mathematical science to support the idea of the possibility of knowing things in themselves. The ultimate result of the *Aesthetic*, therefore, seems to fall on the side of Scepticism, in so far as it confines knowledge to phenomena, or at least gives no encouragement to the idea of its extension beyond phenomena; and on the side of Dogmatism, in so far as it proves that mathematical truth is due to *a priori* synthesis, and yet objective. When we go on to the *Analytic*, we find that another step is made towards the exclusion of any knowledge of things in themselves and the confirmation of the reality of our *a priori* knowledge of phenomena. For it is there shown that the *a priori* forms of conception cannot, any more than the *a priori* forms of perception, supply an instrument by which we may reach any knowledge of reality not given in sense; while they do supply, and are needed to supply, principles for empirical knowledge, *i.e.*, for knowledge

The *Aesthetic*

The *Analytic*.

of phenomenal reality. The result, therefore, is to fortify still further the objective validity of *a priori* principles, and to show indeed that without them no empirical knowledge is possible: but at the same time, it is to strengthen the position of Scepticism in relation to things in themselves, by showing that such principles are objectively valid only as principles for the determination of phenomena. The *Dialectic*, finally, falling back on that pure unity of thought in itself, which is presupposed in all conceptual synthesis, shows that, while that unity suggests ideas of noumena or things in themselves, which are not, as such, objects of experience, and so gives rise to certain problems which experience cannot solve, it cannot enable us to make mere ideas a basis of knowledge, but only to use them as an ideal, by which experience may be stimulated and directed, without the hope of ever reaching or verifying it. The conclusion, therefore, to which the *Critique* as a whole brings us is one which coincides, in the main, with the results of Scepticism. For while all the *a priori* possessions claimed for the mind are, in a sense, vindicated; while the *a priori* forms of perception and the *a priori* conceptions of the understanding are both proved to have objective validity; and even the ideas of reason are shown to have a necessary function in relation to the knowledge of objects: yet they are all conceived to expend their usefulness on experience, *i.e.*, on the knowledge of objects which are merely phenomenal: so that nothing seems to be left to bring us into any relation to things in themselves.

The *Dialectic*.

Relation of the *Critique of Pure Reason* to the *Critique of Practical Reason*:

We must, however, remember that in relation to noumena the verdict reached by the *Critique* in the last stage is really an open one; for, while it shows that the ideas of reason have a use in relation to experience, it shows also that they stand in an asymptotic relation to it, as giving rise to an ideal of knowledge which cannot be realised in experience. The *Critique* thus leaves room for the possibility that the ideas of reason may refer to realities which, because of the nature of our perceptions, as well as of our *a priori* conceptions (which have essential relation to these perceptions), cannot be determined as objects of knowledge. And it is into this room that,

according to the *Critique of Practical Reason,* the moral consciousness introduces itself—giving assertorial value to the ideas which the *Critique of Pure Reason* left problematical, and changing the possibility of things in themselves, which correspond to the ideas of reason, into a certainty, though a certainty of faith and not of knowledge. The *Critique of Practical Reason* thus, so to speak, puts in the keystone which was wanting to the completeness of the *Critique of Pure Reason,* and gives the final sanction to that dualism of phenomena and noumena which was throughout presupposed. For, though in the *Aesthetic* and *Analytic,* the phenomenal character of the objects of knowledge is proved, in one sense of the term phenomenal, *i.e.,* in the sense that they are essentially objects of our consciousness, still the ultimate reason for separating noumena or things in themselves from these objects is given only in the *Dialectic,* where it is shown that there are *ideas,* which arise in connexion with experience, and which even in a sense are its presuppositions, but which yet are not realised in any of the objects of experience. And this distinction only gives rise to a doubt, or a consciousness of ignorance, until an independent basis is found for the assertion of the reality of the objects of these ideas. The *Critique of Practical Reason* thus first enables us to give the right interpretation to the beginning of the *Critique of Pure Reason.* The further interpretation of both in the *Critique of Judgment,* in which Kant attempts to mediate between the theoretical and the practical consciousness and in which he all but brings them together in a higher unity,—all but turns the realistic Dualism of the first two Critiques into an idealistic Monism,—I need not here do more than mention.[1] Enough has been said to show how easily Kant is misinterpreted, if we stop at any stage of his argument short of its final result. Kant advances in a sort of alternation of movement between scepticism and dogmatism; but his ultimate aim and purpose is to put the fundamental truths of Metaphysic on an immoveable

and to the *Critique of Judgment.*

[1] This part of the system, it may be admitted, was not clearly within Kant's view at the beginning, as is shown by the change made in the note to the *Aesthetic* (A. 21) in the second edition of the *Critique* (B. 35)

basis by removing them from all appearance of collision with the principles of empirical knowledge; or, looking at it from the opposite side, it is to show that the principles of empirical knowledge imply a consciousness which is not limited to experience, but rather itself limits experience; and that that consciousness, while incapable of giving us the kind of knowledge which we have of the objects of experience, is yet in itself the source of a rational certitude, as to those things which can neither be seen with the eye nor heard with the ear, and which it is beyond the power of our imagination to picture or of our understanding to determine, *i.e.*, to comprehend as objects of knowledge.

First form of the problem of the *Critique of Pure Reason.*

Turning now to the special question of the *Critique of Pure Reason,* we must undoubtedly say that, taking that treatise as a whole, and without reference to any of Kant's other works,[1] it is a proof of the limitation of *a priori* knowledge to experience, based upon an examination of the conditions of the knowledge which is thus limited. At the same time this statement is too simple, if we do not add that, in showing this limitation of *knowledge,* Kant at the same time shows the necessity of the *thought* of objects beyond experience, and leaves open the question as to their reality and as to the possibility of proving it. Still, in the main and in the first instance, we have a right to say that the *Critique* explains, by the investigation of the conditions of the *a priori* knowledge which we actually possess, that such knowledge is not possible in regard to the objects of those inquiries, which we "cannot but recognise as at once far superior in importance, and far more elevated in purpose than all that the understanding can know in the sphere of experience." Hence in the Introduction to the *Critique,* where he formulates the general question, Kant does not ask how experience, or knowledge of phenomenal objects in general, is possible, (a question which rises upon him subsequently in the course of thought into which he is led in answering the first question,) but simply how *a priori* knowledge of

[1] Of course, the answer would be different, if we took the *Aesthetic*, or the *Analytic* separately as wholes, which would be nearly, though not quite, as legitimate as to take the *Critique of Pure Reason* itself as a whole.

such objects is possible. For it seemed obvious to him that it is only by an *a priori* synthesis that we can go *beyond* the region of experience, and, primarily at least, it was with reference to this " beyond " that the question of the conditions of knowledge *within* experience interested him.[1] In this point of view, then, it is distinctly to be admitted that Kant, in the first instance, raises no question as to the possibility of knowledge or of *a priori* knowledge *within* the limits of experience. So far, his attitude of thought is shown clearly in the assertion that such *a priori* knowledge of empirical objects exists, and that its possibility is shown by its reality.[2] Thus all that the critical philosopher has to do is to *explain* the fact of the existence of *a priori* knowledge of empirical objects, in order that he may by this explanation determine the possibility of similar knowledge of objects, which are not empirically given. In this point of view, Kant, while he recognises with Hume, that the universality and necessity of the principle of causality cannot be explained by experience, refuses to follow him in reducing that principle to an

[1] Of the distinction between Kant's first problem, "how *a priori* knowledge is possible" and his second problem, how "experience is possible," more will be said in the sequel. I owe much to Dr. Vaihinger's luminous critical account of the different ways in which Kant stated his problem in his *Commentary on the Critique*. (Cf. especially I. 189, 357, 387 *seq.*) I think he sometimes goes beyond what is conceivable in his representation of Kant's unconsciousness of the change of his own point of view, and does not attribute enough importance to the propaedeutic intention of Kant. We have evidence that Kant often deliberately began with imperfect statements which he afterwards modified and corrected. (Cf. the statement of Jachmann quoted previously, p. 64.) A direct reference by Kant to the imperfection of his first statement we have in the *Critique* (§ 26; B. 161): and he must have been conscious that the whole argument of the *Aesthetic* was more deeply modified by its abstraction from the *a priori* conceptions than could be gathered from what is said at the beginning (A. 21; B. 35). Again in the *Prolegomena*, Kant speaks as if the question, whether pure mathematics were possible, was completely answered in the *Aesthetic*, but he could scarcely be supposed to have there forgotten his own proof in the *Critique* that *a priori* conceptions are necessary to mathematics. Further evidences will appear in the sequel. On the other hand, it must be admitted that direct statements by Kant as to his method are not often forthcoming. Kant seldom looks backward; and it is, therefore, hard to discover how far he was aware of the extent to which his first statements needed modification. He was certainly not aware of the full extent to which this was required.

[2] B. 20.

effect of particular experiences (magnified by custom) upon the imagination; and he even suggests that Hume himself would not have adopted such a view, if he had seen what it involved, when universalised and applied to the principles of mathematics. There *is* a pure mathematical science, and there *is* a pure physical science, which yet is objectively valid: so much Kant asserts as a fact, and what he attempts to show is only that this fact does not carry with iself the inference that *a priori* knowledge is possible of any other than empirical objects. What the sceptical suggestion of Hume does for Kant is to make him realise that the fact of such knowledge is one that needs explanation, seeing that it is a knowledge that goes greatly beyond anything that could be verified by any number of particular experiences. The fact itself is an interesting problem: for it involves an anticipation of experience, nay even an anticipation which goes beyond, not only all that has been, but all that could be, given in experience. Thus, when we lay down the principle that the angles of a triangle can never be either more or less than two right angles, or that space has three and only three dimensions (while time has only one [1]), we anticipate an endless series of experiences, which we have not yet had, and which, indeed, we never can have. We, as it were, dispose by anticipation of all space and its contents. In like manner, when we say that matter is indestructible and that its quantity cannot be either increased or diminished, we lay down a law which we cannot possibly verify, and yet which we do not hesitate to express without qualification. We are thus disposing by anticipation of all time and its contents. That we do this without hesitation is an undoubted fact; and it is probable that we should never raise a question as to our right to do it, were it not that the principles used in determining objects in time and space and used, as the history of science proves, with great success, seem to lead us into many difficulties when we apply them in relation to objects in general; and were it not that the ideas of time and space themselves give rise to similar difficulties, whenever we ask whether they are or are not universal conditions of objective reality.

[1] A. 30; B. 46.

Thus the very ideas and perceptions, which up to a certain point form the securest guides for our investigations, seem beyond that point to break down, and leave us face to face with insoluble problems. Mathematics by its *a priori* determination of space arrives at conclusions which are capable of innumerable applications, so long as we are dealing with external objects; but if we take space as a universal condition of all objective reality, we are led directly to the denial of the existence of spiritual substances; and even in regard to the material world itself, we are entangled in hopeless dilemmas, as to its limited or unlimited extent, and the finite or infinite divisibility of its parts. In like manner, the principle of causality is a necessary guide to all our investigations in relation to physical objects; but if we treat it as an absolute principle, we are obliged to deny the existence of any free or self-determining being and of any first or uncaused cause,—a conclusion which comes into conflict with the principle of causality itself. Such results show that we cannot treat even the most certain principles of science as absolute; and if they are not absolute, the question immediately arises, what is the ground of their validity within the sphere in which they are valid? For if we can discover *that* ground, we shall know also why they are invalid beyond the sphere of experience.

How does doubt of the *a priori* principles of knowledge arise?

Hence, "reason has this strange fate in one of the regions which it seeks to bring within knowledge, that it finds itself burdened with problems, which it is unable to set aside, because they are presented to it for solution by its own very nature; but yet that it is unable to solve these problems, because they transcend all its powers."

"Into this perplexity it falls without any fault of its own. It starts with principles, the use of which in experience it cannot avoid, and which, indeed, experience abundantly justifies it in using. With these it rises gradually (its own nature impelling it) to ever higher, ever more remote, conditions. As, however, it becomes aware that in this way its work must ever remain incomplete, because every answer gives rise to a new question, it finds itself compelled to take refuge in certain principles which transcend all possible empirical application, and

which yet seem to be so little open to suspicion, that even the common intelligence readily admits them. But in so acting it plunges at once into darkness and contradiction: and though it may indeed gather from this result that there is some latent error in its procedure, yet what that error is it is unable to discover. For the principles it has been using, just because they reach beyond the limits of all experience, can be brought to no empirical test."[1]

It is through their being used beyond the limits of experience.

We may paraphrase Kant's view of knowledge as follows:—Experience means knowledge of things given us in sense, and it is admitted that, prior in time to the impressions of sense, there is no such knowledge. But this is not to be taken to imply that there is nothing in experience which is not due to sense. By experience[2] we mean knowledge of particular facts as connected by general principles. Now, the knowledge of such principles cannot be legitimately derived from the impressions of sense, which, if they give us knowledge at all, give knowledge only of particulars as such. If it has any legitimate derivation, or, in other words, if it is knowledge at all, it must be derived directly or indirectly from the mind itself, or, in other words, it must be *a priori* or based on what is *a priori*. If, however, we take the highest principles of this kind which we can find, the principles of mathematical and physical science, and if we follow them out as if they were *absolute* principles, we find ourselves entangled in insoluble difficulties. Thus the principle of causality carries us back from experience to experience, till it finally carries us beyond all possible experience, and forces us either to extend the succession of phenomenal causes *ad infinitum*, or to suppose the existence of an uncaused cause,—a new conception, altogether opposed to that with which we have hitherto been working. Thus we are brought face to face with an antinomy which we cannot solve, for whichever of these alternatives we adopt, we come into collision with that demand for a cause to explain every effect, which had been

[1] Preface to the first edition of the *Critique*.

[2] There is a certain ambiguity in Kant's use of the word experience which it is difficult to avoid in reproducing his thought. It is here used in its highest sense, but it often means merely the particulars as given in sense.

our unerring guide within the limits of sense-experience. Now, this means that reason is at variance with itself, if the principle of causality is to be taken as absolute; or, if not, then reason must have in itself a higher principle, which will at once prescribe, and limit, the application of this law of causality, prescribe it *within*, and limit it *to*, the sphere of sense-experience. And if this latter alternative be the true one, the only question remaining will be, whether the limiting principle can itself be used to extend our knowledge into the region beyond the limit.

Necessity of showing the conditions of the validity of these principles.

Now, what has been exemplified in the case of causality, is to be applied universally to all the general principles, by the aid of which our empirical knowledge, whether ordinary or scientific, is developed. For, as will be shown more fully in the sequel, all such principles, when treated as absolute, lead to difficulties similar to those just mentioned. We have, therefore, no security for those principles or for anything which we know by means of them, unless we can see how such knowledge is possible, and at the same time, what is its limit. But it is to be observed, that the doubt so cast on the principles of experience, as such, is reflected back on them from their application beyond experience, and that, therefore, the determination of the question *how* they are valid within experience, has its main value in relation to the further question of our knowledge of that which is beyond experience. We ask how *a priori* knowledge of objects is possible in the sphere of sense-experience, (or in the sphere of physical and mathematical science,) in order that we may discover whether and how it is possible beyond that sphere. For, if it is not so possible, it must be because some element was present in the former case which is wanting in the latter. On the other hand, if we ask whether *a priori* knowledge is possible in the region of sense-experience, it is only because those very principles, which are our safest guides in relation to the physical world, seem, when we carry them beyond it, to lead to a Materialism, which itself again breaks down in Scepticism.

Should Kant's critical doubt have gone further?

I have already spoken of the rationality of the attitude which Kant thus takes up. It has, indeed, been argued that in Kant's assumption of the truth of the mathematical

and dynamical principles, there was still an element of "dogmatic slumber" which he had not yet thrown off, and that a thoroughly *critical* philosophy would need to begin with a less limited doubt. But the answer is that doubts as to a coherent body of science can legitimately arise only, as they do with Kant, at its boundary, *i.e.*, only because there is something,—some fact or generally accepted idea,—with which the principles of such science come into collision when they are universalised, or because, when so universalised, they come into collision with themselves. In other words, doubt arises because some other element of reality—some element which the science in question has neglected, but which yet is seen to be necessarily connected with its objects as part of the same whole with them—is not accounted for by such science. Or, what is the same thing in another aspect, doubt arises, because the object of such science, when taken as a *res completa*, as a whole in itself which is not part of a greater whole, breaks down in self-contradiction. Doubt in any other sense, as was shown in the first chapter, involves the self-contradiction of absolute scepticism. It is virtually an attempt by means of the intelligence to reach beyond the limit of the intelligible world.

Objects of Kant, (1) to limit *a priori* knowledge to experience:

Kant's denial that we can know what is not given in experience is, essentially and in the first instance, a limitation to experience, *i.e.*, to the physical world, of those universal and necessary principles, by the aid of which alone we can reach beyond what is immediately given in sense. This purpose is already indicated in the investigations out of which the *Critique* arises; for in the *Dissertation,* as was shown in the last chapter, his main aim was to separate the forms of time and space,—as forms of sense and therefore applicable only to phenomena,—from the pure *a priori* conceptions, through which he still believed that noumena or things in themselves might be known. In the *Critique,* he extends the same procedure to the pure conceptions, which also he shows to be essentially determinations of phenomenal objects as such. The effect of this is to leave only the ideas of reason as means of determining things in themselves; and these have in his view a value, not for knowledge but only for

thought, as problematical conceptions which are made assertorial only in the faith of practical reason.

(2) to set free what is beyond experience from empirical conditions.

This, however, means for Kant not the negation of all certitude as to that which lies beyond the limits of experience, but rather the opposite. It means the limitation of the *a priori* principles, by means of which alone knowledge can be extended beyond what is given, to experience; but it means also the freeing of that which is beyond sense-experience from the determinations to which all empirical objects as such, *i.e.*, all the objects of Mathematics and Physics, are subjected. It means the denial that nature and necessity include everything; nay, it means the assertion that nature and necessity have a significance only in relation to a reality which is beyond them. For what Kant conceives himself to prove is that the necessity of nature with all its spatial and temporal conditions, is necessarily referred to a self, which is not a part of nature because it is that for which nature is: a self also which has in its consciousness of itself a principle by which it can determine its own activity independently of nature. When, therefore, it is alleged, as it has been alleged by some, that the *Critique of Practical Reason* is an after-thought, the object of which is to undo the negative results of the *Critique of Pure Reason,* this is not only a mistake as to the way in which Kant conceived his own system, but it involves the separation of two elements which in it are essentially related, viz., the limitation of experience and the assertion of that which limits experience as being itself beyond the limit. In a passage in the *Prolegomena,* Kant makes it the main distinction of his own philosophy from that of Hume, that in the former Metaphysic has not merely a negative but also a positive value. "Hume called his destructive philosophy Metaphysic and attached a great value to it: indeed, he tells us that Metaphysics and Morals are the weightiest branches of science and that Mathematics and Physics are not half so important. That acute writer was here, however, looking only to the *negative* advantages which speculative philosophy would gain from the moderating of its excessive pretensions, inasmuch as this would take away the very ground for many interminable

disputes which confuse the human race: but he lost sight of the *positive* evil which must accrue, if reason should be deprived of those most important of all prospects or outlooks, which enable it to set the highest good as a motive of endeavour before the will."[1] And in the same spirit, in the preface to the second edition of the *Critique*, after dwelling upon the negative use of criticism as limiting knowledge to objects of experience, he adds that this limitation of knowledge is by no means a denial of the possibility of a consciousness of objects beyond experience. "We must be able if not to *know*, yet to *think*, things in themselves. For, otherwise, there would follow from the limitation in question the preposterous conclusion that phenomena exist without anything of which they are the phenomena or appearances. Now, if we were to admit that the distinction, which the *Critique* makes necessary, between things as objects of experience and the same things as things in themselves, is an unreal distinction, we should be obliged to extend the principle of causality, and with it the mechanical order of nature, to all things whatsoever. It would then be impossible for us to say of the same being, *e.g.*, the human soul, that its will is free and yet that it is subjected to the necessity of nature, *i.e.*, that it is not free, without falling into manifest contradiction; for we should then be obliged to take the soul in the same sense in both cases, and could not, therefore, attribute to it contradictory predicates. If, however, the *Critique* has not erred in teaching that the object should be taken in two senses,—as phenomenon and as thing in itself; if its deduction of the conceptions of understanding holds good, and if consequently the principle of causality has application only to things in the former sense, *i.e.*, as objects of experience, while in the latter sense, or as things in themselves, they are not subjected to it: then the same will, which in its phenomenal appearance, its visible activity, is conceived as necessarily in accord with the law of nature and therefore not free, may without any contradiction be thought of as free, or not subjected to that law, when it is regarded as a thing in itself. . . . The same explanation of the *positive* use of critical principles may

[1] R. III. 7; H. IV. 6.

be applied to our conceptions of God and of the simple nature of the soul, though for the sake of brevity I pass them over for the present. But the general result is that I cannot postulate the reality of God, freedom and immortality, for the behoof of the practical use of reason, unless I am able to deprive speculative reason of all its claims to a transcendent knowledge of the real being of things. And this I can do only if I show that, in order to attain such knowledge, it must make use of principles which really apply only to the objects of possible experience, and must treat things in themselves as if they were phenomena. . . . I must therefore put *knowledge* out of the way in order to make room for *faith;* whereas the Dogmatism of Metaphysic, *i.e.*, the groundless presumption that we can make our way in Metaphysic without criticism, is the true source of all that counter-dogmatism of unbelief that comes into conflict with morality."[1]

The ultimate object of the *Critique* not empirical.

One more passage may be quoted from a later treatise of Kant, which shows how constantly he looked at the deduction of the *a priori* principles of experience as the stepping-stone to a certitude, though a certitude not of knowledge but of faith, in relation to that which is beyond experience. Speaking of transcendental philosophy, he says that, "in it since the time of Aristotle not much progress has been made," a slowness of advance which is due to the nature of the subject: "for, just as Grammar resolves the form of a language into its elementary rules, and just as Logic in a similar way resolves the form of thought into its elements, so Transcendental Philosophy resolves knowledge into the conceptions which lie *a priori* in the understanding and have their use in experience. It is a system, the toilsome elaboration of which we might well have spared ourselves, if our aim were only to determine the rules of the right use of those conceptions and of the principles based on them, with a view to empirical knowledge. But the case is very different, if our purpose is to advance from the sensible to the supersensible. For then it becomes absolutely necessary to measure out, in the most thorough and careful way, the faculty and principles of the understanding, in order that we may discover from

[1] B. XXVIII.-XXX.

what starting point and by means of what aids and instruments, the reason may make its way upwards, from the objects of experience to those objects which are beyond experience." [1]

Is there any change in Kant's view of the relation of knowledge to thought in his later works?

It appears, then, that Kant's limitation of knowledge to experience, and especially his denial of the possibility of any *a priori* extension of knowledge beyond the limits of experience, may easily lead to a misunderstanding, unless we keep in view two things: in the first place, that this limitation is based on the reference of experience, (so far at least, as it is determined by *a priori* principles, and, therefore, so far as it goes beyond the data of sense,) to a principle of unity in the conscious self which is not an object of experience; and, in the second place, that the ultimate end sought in this limitation is not merely the refutation of dogmatism and of scepticism, but the emancipation of the self and also of the other supersensible

[1] R. I. 489; cf. also I. 559; H. VIII. 520, 577. It may be said that all these passages (from the *Prolegomena*, the second edition of the *Critique*, and the *Essay on the Progress of Metaphysic since Leibniz*) are taken from works written after Kant had been alarmed by the "idealistic" or Berkeleian conclusions deduced from the first edition of the *Critique*. But the doctrine that we are able to *think* noumena though not to *know* them, belongs also to the argument of the first edition. No doubt this '*thinking*,' as will be shown more fully in the sequel, involves a really synthetic movement of pure thought, which is inconsistent with Kant's view of it as essentially analytic. But in any case it is an element necessarily involved in Kant's fundamental conception of self-consciousness, which cannot be removed from his *Critique* without destroying it. All that can be admitted, therefore, is that Kant was led, by the direction of the attack made upon him, to lay more emphasis on an aspect of his argument to which he had hitherto given less attention. No doubt this gave rise to a certain readjustment of the relation of his own to other philosophies; but even this was mainly a consequence of the immanent development of his system; of the necessity under which he was of looking at its principle on a different side when he came to apply it to morals; and also of that clearer consciousness of his own meaning, which he gained as he escaped from the labour of detail and was able to regard his system as a whole. The extent to which this development or change went will be considered more fully in the sequel. In one important point only is there a change in the second edition, viz., as to the relation of inner and outer sense. But I shall afterwards show that, in this addition to the *Critique* and in the new *Refutation of Idealism* which is connected with it, Kant was not really recoiling towards that common sense realism, which, in the first edition, he had left behind, but advancing towards that more complete and consequent application of the principle of his Transcendental Deduction, which alone could clear it from the inconsistent psychological element which had adhered to his first statement.

realities, (the ideas of which arise out of, or in connexion with, the consciousness of self,) from the conditions under which they must be brought, if they were objects of experience. It is true that the importance of this second object is more definitely insisted on in the *Prolegomena* than in the first edition of the *Critique* and in the second edition of the *Critique* than in the *Prolegomena*. This, however, may be explained without supposing any actual change in Kant's view. It may be admitted that Kant sometimes had his ideas drawn out of focus by the concentration of his thought on his immediate task, and that he sometimes makes statements which are only to be explained by supposing that, for the moment, he is not taking due account of the relation of his immediate argument to the whole course of reasoning of which it is a part. The mixture of the conscious and the unconscious in all original intellectual work is very subtle, and a writer may often become aware that he has not expressed, or not expressed exactly, all he meant, only through the misunderstanding of others. Kant was perfectly honest, if it is necessary to say so, in asserting that all the changes introduced into the text of the second edition of the *Critique* (with one or two specified exceptions) were merely formal improvements in the manner of statement of a view which he had all along been maintaining; and undoubtedly, he would have said the same thing of his latest restatement of that view, in the essay on the *Progress of Metaphysics since the Time of Leibniz*. Nevertheless, it may be admitted that through all these formal changes Kant was progressing towards a clearer apprehension of his own thought, such as was tantamount to a development of it. With regard to the point to which we have been specially referring, viz., the relation between the negative and the positive uses of metaphysic, Kant's final survey of the ground has a clearness and balanced fulness which we do not find at any earlier point. But a fair criticism will recognise that there is no external change, but only a development of ideas which are already present in the first edition of the *Critique*.

The problem of the *Critique* changes as Kant goes on to solve it.

In saying so much, however, we have to add the caution that the problem of the *Critique* has an essentially

dialectical character; or, in other words, that it changes its form as Kant advances from one stage of its solution to another. Or, perhaps it would be more accurate to say that, in dealing with the special questions which need to be settled with a view to his general problem, Kant comes upon answers which force him to transform those very questions, and ultimately to modify the general problem itself. The general problem was, as we have seen, to discover the conditions of an *a priori* knowledge of sensible objects which we are assumed and acknowledged to possess, with a view to determine the possibility of a similar knowledge of supersensible objects, of which we cannot be assumed to be even capable. Thus Kant was not, in the first instance, inquiring into the conditions of knowledge generally, but simply into the conditions of *a priori* knowledge; for, as it is obvious that there can be no *a posteriori* knowledge of supersensible objects, it is only in as far as the knowledge of empirical objects is *a priori* that it can cast light upon the main problem which Kant has in view. Furthermore, his only concern with the *a priori* knowledge of empirical objects is simply to explain it, to exhibit the conditions which make it possible, and not to vindicate it or prove by any other principles its acknowledged validity.

Second form of the problem: to prove that there is *a priori* knowledge and that through it alone experience is possible.

But as Kant advances in his attempt to deal with the problem of the conditions of our *a priori* knowledge of empirical objects, the nature and direction of his argument is gradually changed, and that in two ways. In the first place, instead of an explanation of the conditions of an *a priori* knowledge which is assumed to exist, we find Kant giving us a proof that it does exist; and in the second place, instead of an account of the conditions under which one kind of knowledge, viz., *a priori* knowledge, of empirical objects is possible, we find him giving us an explanation of the possibility of knowledge or experience in general. These changes are at first very confusing, and they have naturally led to the charge against Kant that his argument is simply a "vicious circle"; yet a careful consideration will show that they are the inevitable results of the development of the problem itself. The difficulty alters as we attempt to solve it; and the only answer that

can be given to Kant's first question is one which shows that it is not the right question, or at least that in it the problem does not take its proper form. Hence what appears as a "vicious circle" is really the result of the fact that the first question involves an uncritical view of things:—or, in other words, that it involves at once an unreasonable dogmatic assumption and an unreasonable doubt based on that assumption: and we can only attack the doubt through the assumption. The steps of this transition, as it is made by Kant, are as follows. In the first place, the *a priori* principles of mathematics and of pure physics, which are the sources of our most certain knowledge of empirical objects, and which were at first assumed as unquestionable,—as, in fact, shown to be possible by the fact of their existence,—become subjected to a doubt which is reflected back upon them from their use beyond the limit of sensible experience. As is pointed out in the first words of the preface to the first edition of the *Critique*, it is in the natural extension to what is *beyond* existence of the principles which have guided us to so many valuable results *within* experience, that we fall into the antinomical difficulties of metaphysics.[1] But these difficulties awake a doubt of the principles that led us into them, which cannot be removed until we are able to draw a line between the sphere in which they are valid and the sphere in which they cease to be valid. From this point of view Kant who at first, as has been well said, was "led by Hume to call into question not *a priori* science, but only the account of it given by the Leibnizian school,"[2] became conscious that that science itself needed a vindication. Hence we find Kant saying that Hume, because he did not distinguish the objects of experience from things in themselves, was naturally led to regard the idea of cause as itself illusive;[3] and that this view, when universalised,

[1] Quoted above, p. 218.

[2] Cohen, *Kant's Theorie der Erfahrung*, p. 55.

[3] R. VIII. 170; H. V. 50. Cf. A. 765; B. 793. Note that in these passages Hume's Empiricism is conceived by Kant as in the first instance producing only a scepticism as to the possibility of knowing things in themselves. But, as Kant goes on to argue, the general repudiation of *a priori* principles involves a denial also of the *a priori* elements of experience, and thus deprives experience

must necessarily lead to a "universal scepticism,"—a scepticism not only in regard to all the knowledge which pure reason claims for itself, *i.e.*, not only in regard to metaphysics, but also in regard to physics and mathematics, and even in regard to the ordinary use of the intelligence. In other words, the argument from the *reality* of mathematical and physical science to its *possibility* is disturbed by the fact that at a particular point the principles, on which such science is based, break down and give rise to antinomies; and so long as the region of error and illusion is not marked off from the region of truth, the doubt, which visits the former, must invade the latter. It is only when the objectivity of empirical phenomena is distinguished from the objectivity of things in themselves, that scepticism can be prevented from passing from the region *beyond*, to the region *within*, experience. Hence, that *à priori* knowledge of the things of experience, which at first was assumed as a fact that needed no proof but only an explanation, comes to be regarded as itself requiring a "deduction" or vindication. An account of the conditions of a knowledge which we are supposed to have passes into a proof that it is possible for us to have it. And this, of course, involves that we are not allowed to reason from it as something certain to something else which is proved by means of it, but that we are obliged *first* to establish its truth on the ground of the previously ascertained truth of something else. In other words, we do not merely assume *a priori* principles as true of the objects of experience and ask for an explanation of the conditions on which such knowledge depends, but we assume ordinary experience as our starting point and basis

of that which is essential to it as a knowledge even of phenomenal objects. Hume, therefore, cannot stop short of universal scepticism. Cf. A. 762; B. 790. "If we cannot make intelligible the possibility of principles of the understanding which anticipate experience, we may at first doubt whether we really have such *a priori* possessions, but we cannot assert the impossibility of our having them. . . We can only say that if we could determine their origin and continuance, we should be able to determine the compass and limits of our reason." In this way we have a right to express "a thoroughgoing scepticism as against all dogmatic philosophy which proceeds on its way without previous criticism of reason, but not to interdict such positive procedure when it has been duly prepared for and secured against doubt by such criticism."

and argue to the truth of the *a priori* principles, without which it could not exist.

Thus the *a posteriori* has no existence apart from the *a priori*.

This last sentence, however, points to another change of the problem which Kant's argument brings with it. The contrast with which Kant began was the contrast of *a priori* truth, which as such is necessary and universal, with empirical truth, which as such is particular and contingent. According to the view thus presented, experience can tell us that an object has a particular predicate at the moment when it is perceived, but not that it must have it, or therefore, that it always has it: for, unless we are able to recognise a necessary connexion between subject and predicate, we cannot, from the perception of their particular coexistence or succession, gather anything as to their relations at any other time or place. It follows, then, that we can base universal propositions only on necessity of connexion in thought. Thus what Hume states as to causality must be universalised. Our sensible experience does not authorise us to go beyond particular judgments of coexistence or succession, or to say anything about the universal relations of the predicates of an object to each other or to their subject. But again such particular judgments tell us merely what we individually experience at a particular time: they are merely "judgments of perception," that indicate particular states of our subjectivity; and the question arises how we can ever go beyond such judgments. As a matter of fact, we find ourselves continually making judgments which refer, not merely to appearances of our subjectivity at a particular time, but to objects which are conceived as permanently existing, even when they are not perceived; and we find ourselves, not merely recognising successions of appearances of these objects for our subjectivity, but recognising them as definite successions of states in the objects themselves, which take place in them as existences independent of our perceptions, and have their ground in their nature as such existences. When we look at it in this way, we begin to see that apart from *a priori* principles which may enable us to go beyond our particular experiences, these experiences would reduce themselves to mere passing appearances of our own subjectivity. In other words,

even particular experiences of objects, as such, become impossible, unless we are able to transcend them. *A priori* principles are necessary to experience as a consciousness of objects, and the denial of *a priori* knowledge of objects means the denial of all knowledge. Hence arises a necessity for a further statement of the problem of the *Critique*. Kant began by asking for the conditions of the *a priori* knowledge of empirical objects, taking that as one species of knowledge, which can be set alongside of *a posteriori* or empirical knowledge: but now he finds that *a posteriori* is impossible without *a priori* knowledge. From this point of view he declares that "the highest problem of transcendental philosophy is, How experience is possible?"[1] In other words, particular experience is taken as a fact, and the *a priori* principles as conditions which are necessary to explain it, and which are "deduced" or vindicated by showing that they are so necessary. The ultimate result which we thus reach under Kant's guidance is a negative argument against scepticism as to our *a priori* knowledge, which shows that there is no foundation, no basis of proof, on which scepticism can take its stand in order to direct an attack against such knowledge. For that very consciousness of the particular and contingent, which Hume had turned against the consciousness of "necessary connexion," is itself dependent upon the *a priori* it is used to condemn. This, I say, is the *ultimate* result we reach under Kant's guidance; but, as we shall find, it is not clear that Kant himself ever fully realised, (it is abundantly clear that he did not always realise,) the degree to which his argument had altered the premises from which at first it started. This point, however, will be discussed more fully at a later stage in our inquiry.[2] Here it may be sufficient to remark that no one has the key to Kant's logic, who does not see that

[1] R. I. 507; H. VIII. 536. It is a point worthy of notice that when Kant thus brings the centre point of the *Critique within* the *Analytic*, he is on the way to establish such a unity of the *a priori* and the *a posteriori* within experience, as makes intelligible the further step by which, in the *Critique of Judgment*, he brings together the law of nature and necessity with the law of freedom, using the idea of final cause or design as a middle term.

[2] See below, Chap. IV.—*The Transcendental Deduction of the Categories.*

this is the result to which it tends, and no one does him justice who does not give him full credit for it.

Kant's view of thought as opposed to knowledge limits his argument.

We have, however, to observe that there is another complexity in Kant's thought, in which we may find an explanation of the fact that the above argument was not carried by him to its ultimate result. While Kant argues that *a priori* knowledge of the objects of experience is possible, because without it experience would not be possible; on the other hand, he also argues that such *a priori* knowledge is not possible through pure thought alone, but only through pure thought in relation to the forms and matter of sense. For the pure *a priori* principles of the understanding, when severed from the forms and matter of sense, shrink into forms of analytic judgment: *i.e.*, into forms of a thought which never goes beyond its own subjective self-identity so as to add to its content or to apprehend an object. This view of pure thought has already been referred to in the last chapter: but it requires a fuller explanation. For the question of the *Critique*, it may be observed, is stated in the Introduction in two alternative forms: how is *a priori* knowledge of objects possible: and how are *a priori* synthetic judgments possible? Now the equivalence of these two questions is not at once obvious: yet a clear view of their relation is essential to the right understanding of the *Critique*.

Distinction of analytic and synthetic judgments: (1) as suggested by Wolff:

The distinction of analytic and synthetic judgments in Kant had a double root. On the one hand, it was connected with the Leibnizian distinction between the principle of identity and the principle of sufficient reason; on the other with the Lockian opposition of 'trifling' and 'instructive' propositions. It was in the former aspect, as we have seen, that the germ of the distinction appeared in Kant's earlier works. Wolff, by reducing the principle of sufficient reason to a form of the principle of identity, had in effect denied that there is any principle of *a priori* synthesis. And Kant only drew the necessary inference when he proceeded (in his treatise *On the Introduction of the Idea of Negative Quantity into Philosophy*) to contrast the *logical* relations of ideas with the *real* relations of things, and to maintain that we needs must go beyond the former to attain a knowledge of the latter. The *logical*

ground of the affirmation of a predicate is that it is analytically contained in the subject; the logical ground of the denial of a predicate is that it is not so contained. But the *real* ground or cause why a thing comes into existence which was not in existence before, or why a thing ceases to exist which existed before; or, putting it in another way, the real ground of the existence or non-existence of anything, is not thus given. Here the mere laws of identity and contradiction will not help us, and we are thrown, according to Kant's view at that time, altogether on experience. For a dogmatic *a priori* philosophy must develop itself purely by the aid of the laws of thought, and if it cannot reach the real reasons or causes of things by means of those laws, it cannot reach them at all. Another consequence necessarily follows, which is expressed by Kant in the treatise on the *Sole Rational Ground for a Proof of the Being of God*: viz., that existential propositions cannot be due to pure thought. For thought, confined to analysis, can only bring out clearly what is contained in a conception already in the mind; it can never enable us to go beyond our subjective conceptions so as to predicate existence of the object of our thought. "Existential propositions are synthetical," and synthesis is impossible to the pure intelligence, because it cannot be achieved by aid of the principles of identity and contradiction. At this time, therefore, Kant's view was that to assert that an object exists for any conception, or to add to, or take from, that conception, is impossible by any *a priori* synthesis, and possible only by means of experience. The mind is thus confined, so far as its own movement is concerned, to a tautological judgment in which a conception is predicated of itself, or in which, at most, the predicate only makes clear what is already thought in the subject. It cannot of itself discover any new connexion of predicates, nor can it go beyond its own ideas so as to assert that any object of its thought exists. The consciousness of the connexion of the predicates of the object with each other as well as of the connexion of the object with the subject that knows it, must be due to impressions received from the object. How, through such affections of our own, we could become

conscious of an object which is not such an affection, Kant did not yet attempt to show.

(2) as suggested by Locke.

The same distinction of analysis and synthesis, which grew out of Kant's criticism of Wolff, presented itself in a somewhat different aspect in the philosophy of Locke. Supposing knowledge of objects through bare thought to be impossible, is it any more possible through bare perception or sensation? In the fourth book of his *Essay,* Locke assumes that the individual substance with all its qualities is given in perception, but that the knowledge we receive of it through perception is strictly limited to the moment in which we perceive it. We cannot learn from it anything but a particular combination of predicates in a particular subject at a particular moment. We cannot say that that subject will possess those predicates at any other time, still less can we assume that the class of subjects to which we give the same name will always possess them. If we make any such statement, the subject of our predicates is only a "nominal essence," *i.e.,* we are speaking only of an idea in our own minds to which nothing may correspond in reality; and all that we can do is to state what is contained in that idea, or in other words what we mean by a particular name. Hence, general certainty is never to be found but in our own ideas, and all general propositions are "trifling," not "instructive"—*i.e.,* they only analyse our ideas. And the counterpart of this is, that all "instructive" propositions are singular; in other words, we can combine a new predicate with a subject only in so far as we have the combination presented in perception; though the "instruction" thus gained does not go very far, since we have no right to generalise either the subject or its relation to the predicate. All we learn is, *e.g.*, that "this piece of gold is soluble in aqua regia," or even strictly speaking, only that it is so soluble at this moment. It follows that "general propositions on matters of fact" are impossible, because they would be instructive or, in Kant's language, synthetic, which is possible only for singular propositions. On the other hand, if singular propositions are instructive or synthetic, their synthesis does not furnish a sufficient basis for a science of nature, seeing they only state a particular

combination of the subject and predicate from which no general conclusions can be drawn.

Influence of Hume.

Hume's criticism of the ordinary and scientific use of the principle of causality was little more than a new application of Locke's previous criticism of the principle of substance. The latter pointed out that the *coexistence* of one quality along with others can be known only as it is perceived, and that perception does not give a ground for asserting any universal relation between those qualities such as is implied in asserting that they belong to one substance. Hume only adds, that the *succession* of two different qualities in a substance, in other words, a change, can be known only as it is perceived, and that this perception also affords no ground for asserting any universal relation between what precedes and what follows. The connexion, as given in perception, is a singular one, from which no general conclusion can legitimately be drawn. If we generalise such a relation, we are no longer speaking of the facts of perception, but of some 'nominal essence' which exists in and for thought alone.[1]

Neither thought nor sense by itself explains synthesis.

Now, if Kant abandoned the rationalistic philosophy of Wolff, because he found that the pure activity of thought does not explain synthesis, he soon began to learn from Locke and Hume that the synthesis which can be explained by perception is very narrowly limited; that by it, in short, we can explain only particular and not universal judgments; *i.e.*, only judgments expressing the presence of a particular quality along with others in a particular perception, and not a universal relation of those qualities in an object which exists when it is not perceived; or, only judgments expressing the particular sequence of the states of an object of perception which corresponds to a particular succession of perceptions in the subject, and not judgments expressing any general rule as to the succession of such states under given conditions in an object which exists independently of its being perceived.

The difficulty of mathematical synthesis as treated by Locke.

When under the converging influence of the English and the German philosophy, Kant became aware of the difficulty of the question of *a priori* synthesis, his thoughts

[1] Green's *Introduction to Hume*, § 223, *seq.*, and Green's *Philosophical Works*, II. p. 2, *seq.*

turned to Mathematics, which both Locke and Hume had admitted to stand on a different footing from all other knowledge, inasmuch as the generality of the propositions laid down in this science was not conceived to preclude their being "instructive." Locke had explained this on the ground that the ideas of Mathematics are not 'ectypes' but 'archetypes'; not derived from any reality independent of the mind, and, therefore, not limited by the perceptions in which alone such reality is supposed to be given. The mind here constructs its own objects and can, therefore, determine their relations universally. The question of Kant, how we can know that principles which are thus laid down by the mind independently of experience, and which confessedly go beyond anything that can be given in experience, have yet objective validity and are not mere constructions of the imagination, had occurred to Locke; but it was disposed of so easily that he evidently did not comprehend its importance. "Real things," he declares, "are no farther concerned, nor intended to be meant, by any such propositions, than as things really agree to those archetypes in his mind. Is it true of the idea of a triangle, that its three angles are equal to two right ones? It is true also of a triangle wherever it really exists. Whatever other figure exists that is not exactly answerable to that idea of a triangle in his mind, is not at all concerned in that proposition." [1] But the difficulty is that, in this case we are supposed to be able to identify the present object of perception with the 'nominal essence' or general idea of a triangle, and then to go on to predicate of that particular object all the other properties which we have discovered in or developed from the idea; we are supposed, in fact, to be able to make general propositions which are not trifling, and to apply them, not merely to a 'nominal essence' or idea, but to a real object. On this view, therefore, thought without perception is synthetic as well as general, and its general synthesis is objectively valid.

Hume's treatment of it.

Hume in his earlier treatise attempted to escape from this difficulty, and to trace back the 'ideas' of Mathematics to 'impressions' of space and time: but the attempt led him

[1] Locke, *Essay*, IV. 4, 6.

to the denial of the objective validity of mathematical truth, in so far as it goes beyond the possibility of empirical measurement. In his *Inquiry* he rather avoids the discussion, and uses language which is not essentially different from that of Locke. "All the objects of human reason or inquiry," he says, "may naturally be divided into two kinds, to wit, Relations of Ideas and Matters of Fact. Of the first kind are the sciences of Geometry, Algebra, and Arithmetic; and in short every affirmation, which is either intuitively or demonstratively certain. That the square of the hypothenuse is equal to the squares of the two sides, is a proposition which expresses a relation between these figures. That three times five is equal to the half of thirty, expresses a relation between these numbers. Propositions of this kind are discoverable by the mere operation of thought, without dependence on what is anywhere existent in the universe. Though there were never a circle or triangle in nature, the truths demonstrated by Euclid would for ever retain their certainty and their evidence."

Relations of ideas and matters of fact.

"Matters of fact, which are the second objects of human reason, are not ascertained in the same manner; nor is our evidence of their truth, however great, of a like nature with the foregoing. The contrary of every matter of fact is still possible; because it can never imply a contradiction, and is conceived by the mind with the same facility and distinctness, as if ever so conformable to reality. That the sun will not rise to-morrow, is no less intelligible a proposition, and implies no more contradiction, than the affirmation, that it will rise. We should in vain, therefore, attempt to demonstrate its falsehood. Were it demonstratively false, it would imply a contradiction, and could never be distinctly conceived by the mind."[1] Hume then goes on to say that, in his opinion, the sole objects of the abstract sciences of demonstration are quantity and number, and that all attempts to extend this more perfect species of knowledge beyond these limits are mere sophistry and illusion; and he concludes with the well-known saying—"When we run over the libraries, persuaded of these principles, what havoc must we make? If we take in our hand any volume of divinity or school

[1] *Inquiry concerning Human Understanding*, Section IV. Part I.

metaphysics, for instance; let us ask, *Does it contain any abstract reasoning concerning quantity or number? No. Does it contain any experimental reasoning concerning matter of fact and existence? No. Commit it then to the flames: for it can contain nothing but sophistry and illusion.*"

Kant's understanding of Hume.

Hume's assertion, that Mathematics deals with relations of ideas, and that a denial of its propositions involves a contradiction, was understood by Kant as meaning that these propositions are merely analytic,[1] and that, therefore, their generality raises no question as to their objective validity. And, in his ignorance of Hume's earlier treatise, he even thinks that Hume would have been led to question his whole view of knowledge, if he had seen that it involved a denial of the truth of Mathematics. This view came the more easily to Kant, because he himself held that mere 'relation of ideas' as such, relations established by the pure activity of thought, can only be relations of identity or contradiction, such pure activity being merely analytic. The point, therefore, to which he was brought by his study of the English philosophy was to recognise that in mere perception as little as in mere conception is there a ground for any synthesis which goes beyond the data immediately given in sense, and that even Mathematics must be explained by an empirical philosophy as a mere analysis of certain general ideas got by abstraction from perception, but which as general ideas must be merely 'nominal essences.'

Kant's doctrine as to mathematical synthesis.

The case of Mathematics, however, as was obvious to Kant, could not be satisfactorily treated in this way. For in Mathematics there is a continual acquisition of new truths which are all expressed generally, and which are at once applied with perfect certitude to objects of perception, nay, which enable us to prescribe beforehand the conditions under which these objects must be perceived. Here, therefore, we have to provide for the case of a synthesis which, as universal, cannot be *a posteriori*, and which

[1] An assertion which is accurate, in so far as it was Hume's first principle that ideas cannot be anything but copies of impressions; but not accurate in the sense that Hume had considered the question of the possibility of synthetic *a priori* judgment and tried to disprove it. See above, p. 187.

nevertheless has to do, not merely with 'nominal essences' or 'relations of ideas,' but with 'matters of fact.' If we can explain this general synthetic movement of thought in Mathematics in such a way as to justify its objective application, we may be able also to explain the other instances, beyond the sphere of Mathematics, in which a synthesis, which as universal must be *a priori* or at least rest on an *a priori* basis, has an objective value.

A priori synthesis in Mathematics and Physics: their difference and agreement.

Kant, then, starts from this point of view. He does not dispute, at least in the first instance, that there is an empirical synthesis which enables us to make particular 'judgments of perception' regarding phenomena or particular objects presented to us in perception. It may be the result of his criticism to show that such judgments are impossible, seeing that it ultimately leaves no 'object' about which such 'judgments of perception' could be made. But, in the first instance, Kant simply points out that, admitting that a particular synthesis can be mediated by sense, which perceives an individual now and here in its particular determinations, we cannot so explain a universal synthesis, which yet is no mere arbitrary combination of ideas, but expresses a universal truth of fact. Nor, again, can we thus explain how a particular synthesis of experience, such as the proposition that A follows B, should be made the ground for establishing a universal law of nature. Now the former is what we see in Mathematics, the latter is what we see in Physics. In Geometry, *e.g.*, we determine space, as represented in perception or imagination, in certain arbitrary ways so as to produce certain figures, and in the figures thus set before us we demonstrate certain properties. These properties, demonstrated in this particular case, we then at once assume to be demonstrated for all such figures, and we transfer the results of this arbitrary process of construction in the form of general laws to the objects which we perceive in experience. In Physics we are not able thus to begin by an arbitrary determination of space or time, and by it to establish universal laws for the synthesis of perceptions, but we are able to universalise a connexion of perceptions which is given in a particular case. Thus having perceived that A follows B, we assert universally that A will always

follow B in similar circumstances. Now the question which Kant asks himself is, How is this possible? How are we able to make universal propositions as to matters of fact prior to all actual experience, and how are we able to universalise particular judgments of perception so as to base general laws of nature upon them?

The answer to the question as to *a priori* synthesis in the *Aesthetic.*

The answer which Kant gives to this question is given in successive stages, and the question itself somewhat alters as we advance from one stage to the next. In the *Aesthetic* he abstracts from any activity of thought in perception or in judgments of perception. He defines sensibility as "a receptivity for the perception of objects," or more fully as a capacity of "being affected by objects so as to acquire through this affection an immediate idea or representation of them." He assumes, therefore, *or he does not question the assumption,* that sense enables us to make judgments of perception, in which we refer sensations to particular objects and so determine them as having particular qualities. The only question here is, how in Mathematics, or in the judgments of common sense out of which Mathematics arises, we should be able to anticipate the synthesis of empirical perception, and without its aid to lay down universal laws as to its possibilities. And the answer to this question is, that in order to make such *a priori* determination of objects of perception possible, time and space must be forms of our perception, *i.e.*, the very conditions on which affections give rise in us to perceptions of objects. For if that be the case, then they will, of course, condition the objects of perception; and whatever determinations we are able to discover as necessary for time and space will hold good for all objects, which must be perceived as *in* time and space. As presented in perception, all external objects are determined as standing in spatial relations to other external objects, and all states of objects whatsoever, even our own states, are determined as standing in relations of time to the states of these and other objects. Just so far, therefore, as we can trace out relations between different figures, or limitations of space, and between different periods, or parts of time, we are able *a priori* to determine relations which will belong to objects as occupying space or time. Nay, we may go further and

say that it is only when determined as occupying particular parts of space and time that objects can be objects of perception for us at all. Thus the universality of the synthesis by which we determine figures in space merely means that this synthesis must necessarily be transferred to the matter of sense, in the same process by which it becomes, or gives rise to, the perception of an object. The external object as such has this determination in space as a prior condition of any further determinations or special qualities, which we apprehend by touch or sight or any of the other senses. "This is the theory that Space and Time are only subjective forms of our sensuous perception and not determinations belonging to objects themselves, but that, just for that very reason, we can determine these our perceptions *a priori* with a consciousness of the necessity of the judgments which we thus make, as, *e.g.*, in geometry. Now determining means judging synthetically." [1]

Further answer in the *Analytic*.

The argument of the *Aesthetic*, however, as has been already suggested, abstracts throughout from an element which yet it everywhere presupposes, viz., the activity of thought. For synthesis or judgment obviously has two sides: it is an addition of one thing *to* another, and it is the combination of one thing *with* another: it is differentiation and it is integration. Now, if we regard sense as a simple receptivity, its sensations (or perceptions, if we could call them perceptions,) simply resolve themselves into a series of states, each without any connexion with the others; and out of this flux of feelings or images no consciousness of any definite object could ever arise. No element could be retained to qualify the others, no identity could be supposed to be present through the differences as the object to which they were all referred. Further, what is but another aspect of the same thing, such a consciousness, if we could call it a consciousness, could never gather itself up into self-consciousness. It would have no permanent unity in reference to which all that presented itself successively in it was determined, and, therefore, it could never become conscious of such a unity. Its life would be like a stream without banks to confine it to any definite

[1] R. I. 498; H. VIII. 529.

course. It could not *know* anything through the impressions of its sensibility, it would be blind to all that was happening in itself. 'Data of sense' might be 'given' to it, but it would have no ideal hand, no intellectual grasp, to receive or hold what was given, but would instantly let it slip in the very moment in which it came.

Necessity of the unity of the self manifesting itself in *a priori* principles of synthesis.

These considerations show us that, for knowledge as well as for perception in the proper sense of the terms, two things are necessary which we have not yet considered. In the first place, it is necessary that there should be a unity which is permanent and into relation with which all the data of sense are successively brought, so that through it they all come into relation with each other; and in the second place, it is necessary that this unity should be active in combining these data in relation to itself. But, further, in order that this unity may combine these data in relation to itself, it must differentiate itself in relation to them, or, in other words, it must supply from itself forms of combination for that which is given as a successive manifold. For the mind is not like a casket into which things may be thrown and in which they may be passively held together. The unity, which the manifold has *for* it, must be bestowed on the manifold by its own activity: and the same unity must be the means whereby that which passes away as a sense-affection is retained as an object or an element in an objective consciousness, so as to qualify, and be qualified by, other elements given through other sense-affections.

The analytic unity of thought cannot supply such principles;

Now, the pure activity of thought, according to Kant, is merely analytic; or if we can call it synthetic, its synthesis is based on analysis. If it brings many individuals to a unity in one species, many species to a unity in one genius, it is merely by aid of an abstraction, which extracts the common element from those different species and individuals. It presupposes a content as present to our consciousness, and merely brings it to a higher unity for our consciousness by an external process of generalisation. We say, "an external process" because, though in this way an effort is made to satisfy the mind's impulse to seek its own unity in its object, yet the whole process does nothing to bring the content of the object any nearer to

the mind than it was at first. We assume at the outset of the process that the object has already been brought into a relation to the mind, and made into one of its ideas; but we do not ask how it has been brought into this relation, nor do we ask how the relation may be improved or the difference be dissolved in a more perfect unity. In the whole process we have, therefore, only a subjective movement of thought in relation to a matter which is assumed to be already appropriated by it, without any explanation of the original process of appropriation. We learn nothing of the way in which that, which is not already determined as an element in the mind's consciousness of itself, is to be brought into the mind; nor do we get any explanation of the method in which the process of appropriation thus initiated may be carried still farther. It is simply that the mind holds the content along with its own identity, and, as it were, repeats the assertion of its own identity upon it. Yet such a formal process of synthesis by means of analysis is in contradiction with itself, in so far as it is still a process of synthesis, a process in which an attempt is made to reach a higher and ultimately the highest universal. For the only meaning of this process is that thought seeks to overcome the difference between itself and its content, or to find a point where that difference disappears. The impulse of thought which makes it generalise is thus its impulse to seek itself, *i.e.*, to seek the transparent unity of self-consciousness, in the object. But in so far as it is merely formal or analytic thought, this effort must be in vain: since the highest universal stands opposed to it in an antagonism which is as immediate and as irreconcileable, as was the antagonism to it of the lowest particular with which it started.

though it furnishes a clue to them.

It appears, then, that formal Logic, when it describes thought as analytic, is describing it as confined to a process which is at once meaningless and self-contradictory, a process which is the negation of all process. This idea will have to be further developed when we come specially to deal with the *Analytic*. Here, it is enough to point out that Kant uses the logical account of the analytic movement of thought in judgment and syllogism, as a guide to the discovery of the nature of the synthetic process by

which thought brings a foreign matter into relation to itself, or by which it goes beyond itself to apprehend a foreign matter. And he finds it possible so to use it, simply because in the formal Logic of the schools there was still a faint shadow of the real process of thought which he was seeking to determine. As we have already seen, formal Logic contradicts itself, in so far as it still represents thought as a process of seeking for unity and for the highest unity, and thus indicates in spite of itself the real nature of that synthetic process by which thought unites itself with its object, or finds itself in that object. Kant, therefore, could certainly find in it a kind of sign-post to direct him to that truth of which it was, we might almost say, the caricature.

Relation of the syntheses of the understanding and of the reason.

In this point of view, then, formal Logic suggests the idea of two kinds of synthesis corresponding to judgment and syllogism respectively. In the first kind of synthesis, a relation is established between the analytic unity of pure thought or self-consciousness and the manifold of perception; or the manifold of perception is subjected to a principle of unity derived from the activity of thought. In the second kind of synthesis, the relation so established, by reason of the imperfect correspondence of its synthesis to the unity of thought, has again to be subjected to another and higher form of synthesis, which aims at altogether harmonising the first synthesis with that unity. The former synthesis gives rise to experience, and the latter to the ideal of reason and to the consciousness of the limitation or phenomenal character of the objects of experience as such. In other words, the former synthesis determines the data of sense so that they present themselves as a system of objects in one experience; and the latter, though failing to give a further determination to these objects, yet even by its failure, discloses that those objects and their system do not correspond to the mind's highest idea of reality.

The deduction of the categories and their limitation to experience.

The possibility of this vindication and yet limitation of experience can only be understood if we recall the results of the *Aesthetic*, with such modifications as are necessary when we regard them from this new point of view. These results were that time and space are *a priori* forms of

perception, under which all objects of perception as such must present themselves. But now it appears that no objects can present themselves as such to the conscious self except through its own synthetic activity, and that apart from that activity, what can be presented is only a 'manifold' without unity, which therefore is not characterised even as a manifold. Not only the matter of sense but even space and time, the pure forms of sense, must wait for an activity of thought to gather them into the unity of objects of perception. We cannot, therefore, say that time and space are principles for the arrangement of the matter of perception in the sense that their unity of itself determines objects of perception in their relations to each other; but merely that they are forms in which it is possible for the data of sense *to be arranged* in a certain order: for the actual arranging of them in that order implies an activity of thought. At the same time, in spite of this change, the relation established in the *Aesthetic* between these forms and the matter that falls under them remains unaltered, in so far as they are still *a priori* determinations of that matter, which it necessarily receives in becoming the object of our perception. But instead of saying that the matter of sense as it becomes object of perception takes on these forms, we must now say that the matter of sense, when determined as object for the conscious subject by the synthesis of the understanding, is so determined *through* the forms of sense. Time and space are, therefore, presupposed as unities in which the objects of experience are placed, in the very act by which they are determined as objects of experience. In other words, the act of thought, by which the data of sense are determined as objects of experience, makes presupposition of another act by which time and space are envisaged as unities in which all the objects of perception are arranged.[1] These two acts, however, are not separated from each other: for we do not first perceive phenomena in space and time, and then determine them as objects, but, in perceiving and determining things as objects, we perceive and determine them as in space and time.

[1] This point cannot be fully explained till we have considered the part in knowledge which Kant assigned to the imagination.

Union of *a priori* perceptions and conceptions in experience.

Now if this be the case, we may understand how it is that *a priori* synthetic judgments, *i.e.*, *a priori* judgments in relation to objects, are possible. They are possible in virtue of the fact that there are both *a priori* conceptions and *a priori* perceptions, or at least *a priori* forms of perception. For so far as this is the case, we have the necessary constituents for *a priori* synthetic judgments, which yet will apply to all the objects of experience. Mere *a priori* conceptions would not entitle us to make such judgments: for they would express merely the general combining activity of thought, by which it seeks to bring all matter presented to it into relation to its own unity; and such combining activity is simply meaningless without anything to combine. Even if we admitted that it could give rise to judgments, they would not be judgments about anything. Nor again would mere *a priori* forms of perception entitle us to make such judgments: for, as forms of perception, they do not entitle us to make any judgments whatever, either by themselves or in combination with a matter. But the *a priori* forms of conception, when directed upon the matter of perception through its forms, will give rise to certain judgments which are at once *a priori* and of objective validity, because they express the conditions under which alone anything can be determined as an object.

Impossibility of a pure synthesis of thought.

On the other hand, we cannot understand this use of the *a priori* conceptions without seeing that it carries with it a limitation: for since they are mere forms of synthesis, they get application and so acquire a real significance only in relation to a given matter—in the present case in relation to the matter given under the forms of space and time. Their value, therefore, as determinations for objects of experience so given, affords no presumption in favour of the use of these or any other kind of mental synthesis, where there is no such matter given. If, therefore, the mind is not satisfied with the unity of judgment, but goes on to seek the higher unity of reasoning, it would need, in order to give objective value to the thought thus conceived, another kind of intuition or perception, and in the absence of such perception it cannot attain to any *a priori* synthesis. The thought of such a unity may, indeed, be of use to us

as setting up an ideal for the continued exercise of the understanding, and stimulating the mind to seek by pro-syllogisms to complete its work and bring back the manifold objects and events of experience to its own unity; but such an ideal is by the very nature of the case condemned to remain an ideal, a thought which cannot be realised in knowledge.

In synthetic judgment the mind goes beyond itself and what it already knows.

We are now prepared to understand the importance attached by Kant to the distinction of analytic and synthetic judgments; and we are prepared also to see how a synthetic judgment is conceived as an act of the mind in which it determines objects, while an analytic judgment is conceived as an act of the mind in which it abides in itself and merely determines the relations of its own ideas. An analytic judgment, in short, deals with what is *already* determined as an idea of the mind and so *already* united with the 'I think' of self-consciousness. But a synthetic judgment expresses the process by which the mind, so to speak, makes a matter its own or goes out of itself to apprehend a matter outside of itself, and to unite that matter[1] for the first time with the 'I think'; or it is an act by which new matter is combined with that which has already been united with the 'I think.' Hence it is synthetic in two ways: as it unites a certain matter of perception to self-consciousness, and as it unites a perceived matter which has not yet been thought to a perceived matter which already has been thought. As, then, thought can determine the data of perception as objects only by combining them with each other, and as, on the other hand, that it can determine no object as such, except by combining these data, it is clear that a synthetic act and the determination of the object as such are, from Kant's point of view, one and the same thing.

Is there such a thing as pure analytic judgment?

Objection has been taken both to the distinction of analytic and synthetic judgments in itself and to the examples by which Kant illustrates it. The former objection has already been shown, and will be further shown, to be just. It amounts to this, that mere analysis is no process or act of thought at all, and only appears to be one because the idea which underlies it of a movement

[1] Of course matter here includes the forms of sense.

by bare identity, is not thoroughly carried out. If this be true, an analytic judgment would really be no judgment but only a meaningless tautology; and it is another aspect of the same statement to say that a purely subjective movement of thought which did not determine an object would not be a real movement of thought, but only a meaningless resting of thought in its own self-identity. Such a judgment would never be made, except as a logical experiment to illustrate an imaginary law of thought. If ever, in a sense, analytical judgments are made, they are intended to communicate to others a thought or synthesis which for us has been already accomplished; or, in other words, to carry *them* through a synthesis to a conception which we have already attained and which we for their behoof analyse. From this it would follow that a judgment which is analytic for one is synthetic for another, and that we can tell *which* it is, only by considering the state of knowledge attained by the individual who makes the judgment. Thus when Kant says that the judgment 'Body is extended' is analytic, but that the judgment 'Body is heavy' is synthetic, it might be answered that it is by a synthesis that the idea of extended substance is formed, and that it is only a further step in the same process that connects the predicate of weight with that of extension. The sole question is, therefore, whether the term 'body' is taken by us as representing the result of a synthesis which has reached the second stage, or at most whether it is so taken in general usage,—a question to which no definite answer could be given, for general usage is fluctuating and uncertain. If we overlook this merely subjective distinction, all judgments are synthetic in the making and analytic when made; *i.e.*, judgment is the process whereby thought advances to a new conception of its objects. The *judgment* is analytic in so far as it expresses an identity, but the *act of judging* develops an identity to a (new) difference, which it at once expresses and overcomes.[1]

[1] There is a synthesis in the process by which the mind goes beyond its pure identity to any object (and, indeed, as has been indicated, there is a double synthesis, since it is only as we combine the elements of the manifold under a conception that we can combine the consciousness of the object so attained with the 'I think'). Hence if we go back to the beginning, there is, on Kant's view, nothing to analyse. If any analytic judgment is possible at this stage,

Importance of the distinction for Kant.

Now, although this is true, yet there is still an important purpose served by the Kantian distinction, which becomes manifest when we have regard to the way in which Kant puts the question of the possibility of synthesis. What, he asks, is the *tertium quid* which enables us to get beyond a conception we have so as to add new elements to it? In the case of a conception which is abstracted from experience, we can answer that the *tertium quid* is to be found in new experience of the same object. But in the case of *a priori* synthesis this answer does not avail, and thought, therefore, it would seem, cannot reach beyond itself. The answer Kant gives is that, though in this case there is no empirical perception of an object corresponding to the conception, by which the conception might be enriched, there is an *a priori* form of perception which may be determined in accordance with the conception, and which, when it is so determined, enables us to add to it. Thus, in the whole science of Geometry, we are simply adding to our conceptions by means of the *a priori* perception of space to which we apply them. This is the only way in which we can deal with the conception of a particular figure so as to

it is only the 'I am I' of self-consciousness, and that, as we shall find, Kant admits to be impossible without a synthesis. Note, however, that the two ideas of bringing any manifold to a unity under a conception and uniting it as an object with the consciousness of the self, (or, what is the same thing, going beyond the self to it,) are contrasted with the bare self-assertion of consciousness in its transparent unity with self into which no difference has been introduced, and which does not go beyond itself to anything other than itself. When Hegel afterwards spoke of the material or extended as that which is external or other than itself, because external to, or other than, the self, he seemed to be making a play upon words. But that idea springs very naturally out of the opposition of thought and perception as exhibited by Kant. I may observe that, if we look at it from the point of view of thought, thought in taking into itself the very form of sense and so schematising its categories, is already synthetic. Hence the determination of body as extended already implies synthesis. For the pure category of substance, as Kant subsequently declares, has in itself no reference to the form of space. On the other hand, if we look at it from the point of view of sense, no manifold can be united into an image of perception and brought under a conception except by a synthetic act, an act that carries us beyond the data of sense. We shall afterwards have to consider more closely the nature of this double synthesis. What is said above, is well expressed in a passage from Reuss (quoted by Vaihinger, I. 261)—"The act by which the connection of two ideas is established is a synthetic judgment: the act by which the already established connection of two ideas is expressed is an analytic judgment."

discover anything more about it than we already know from the conception itself. "Give a philosopher the conception of a triangle, and let him try in his own way to find out how the sum of its angles is related to a right angle. What he already has is nothing but the conception of a figure which is enclosed by three straight lines, together with the conception of its having three angles. Let him reflect on this conception as long as he pleases, he will get nothing more out of it. He may analyse and make quite distinct the conception of a straight line, of an angle, or of the number three; but he will come upon no other properties than those which already lie in these conceptions. But let the geometer take the question in hand. He begins immediately to construct a triangle. Knowing that two right angles are equal to the sum of all the adjacent angles which can be made by lines falling upon one point in a straight line upon one side of it, he lengthens one side of the triangle and thus gets two adjacent angles which together are equal to two right angles. Then he divides the external angle of these two by drawing a line parallel to the opposite side of the triangle, and perceives that he has got an external adjacent angle which is equal to one of the internal angles,—and so on through the rest of the demonstration. In this way he arrives, by a chain of inferences in which he is always guided by perception, at the perfectly self-evidencing and at the same time universal solution of the problem." [1]

The *ultimate* synthesis of thought and perception.

In this reasoning it is assumed that we have already the conception of a triangle and that it is a possible conception, *i.e.*, a conception which can have an object. But this result also must have been due to a previous synthesis in which we constructed that conception in space; for, as a mere matter of conception, we can put together in thought any marks we please so long as they do not contradict each other; but it is only by actually constructing it in space that we know that one figure is really possible and another not. The ultimate synthesis, therefore, on which we fall back is the synthesis by which space is determined in accordance with the *a priori* conception of quantity, or in which an object in space is represented as an extensive

[1] A. 716; B. 744.

quantum formed by adding spatial units to each other. But in this, as in all the subsequent determinations of space, we have the same process with its two sides, conception and perception; the former involving a law or principle according to which the elements are to be combined, the latter supplying a matter which, being combined in accordance with this principle, gives rise to new conceptions or adds new elements to conceptions formerly possessed by us.

Difference of mathematical and dynamical principles.

When we have got thus far, we begin to see that what Kant is maintaining really amounts to this, that all progress in knowledge, or in other words, all synthesis, involves two complementary processes of differentiation and of integration which cannot be severed from each other; but that there are certain cases in which the mind can produce the difference as well as the "functions of unity" by which it is integrated, while in other cases it can only take up the elements which are given to it through affections of sense. At the same time, as we shall see, these two cases are only ideally separable by an act of abstraction; for the pure perceptions, which furnish the matter for *a priori* synthesis, are after all only the forms of other perceptions, and, on the other hand, the *a posteriori* perceptions are integrated only through the forms of perception. Hence integration of the former kind has a side on which it is dependent on the affection of sense, and integration of the latter kind has a side on which it is a pure construction. From this arises the distinction and the relation of the mathematical and dynamical synthesis, or, to put it otherwise, of the synthesis of pure mathematics and that of pure physics.

Perception and conception as elements, not kinds, of knowledge.

That the mental process has these two aspects or sides, that it is at once differentiation and integration, it is not difficult to show, and Kant is nowhere more happy than in showing it. Thus, when he argues for the impossibility of synthesis by mere conceptions, what he is maintaining is that a mere 'function of unity,' a mere integrating principle, cannot add to knowledge, but can at most only enable us to realise more clearly the unity of the elements which for thought are already united; and when he argues for the impossibility of synthesis by mere perceptions,

what he is maintaining is the impossibilty that a mere series of feelings can construct itself into a definite object of thought. The difficulty, however, which embarrasses us most in following out Kant's reasoning, arises from his preserving in relation to those ultimate functions of differentiation and integration that independence, as of two mental products externally fitted to each other, which is intelligible enough when we speak of conception and perception in the ordinary sense. Thus, to take an instance of his own, we can easily understand that an object may be perceived in the distance which on nearer approach we recognise as a man: the conception and the perception, as it were, meeting together and the latter being subsumed under the former. But when we carry our analysis back to the primitive process by which the mind puts its own unity into the 'manifold' of feeling, which it thus 'recognises' as an object, we are troubled by the difficulty that each part of the process involves the other parts. The 'manifold' must be there to be brought together as an object by the mental unity; yet it is only through the mental unity, in relation to which it is successively taken up and brought together, that it can be said to be there at all. Kant seems to suppose, on the one side, a pure unity of thought which in itself is merely analytic, and, on the other side, a mere dispersed manifold without connection; and then he supposes that it is by reference to the manifold presented in sense that the unity becomes synthetic, or supplies those conceptions which may be used in synthesis; while, on the other hand, he also supposes that it is by reference to the unity that the manifold becomes associated, so as to supply an image of perception which can be brought under those conceptions. Yet he himself, as we shall see, maintains that the analytic unity of thought in us presupposes a synthesis of the manifold of perceptions, *i.e.*, that the unity of self-consciousness presupposes the unity of our objective consciousness; and, on the other hand, he is equally solicitous to show that a mere manifold without reference to the unity of self-consciousness is a mere chaos or *Gewühl,* which "for us as thinking beings is as good as nothing." Hence, if we hold Kant to the distinction which he makes between perception and conception, it

seems impossible to relate them; while if we hold him to the relation, we must greatly modify what he says about their distinction. Yet he was as earnest in upholding the distinction against Leibniz as in upholding the relation against Hume, and to leave out either would be to surrender one of the hinges upon which his philosophy turns.

How it was necessary for Kant to maintain both the distinction and relation of perception and conception.

The full explanation of this collision of opposite tendencies of thought in Kant cannot yet be given. But when we consider the historical development of his philosophy, we can see how it seemed necessary to Kant to keep firm hold both of the distinction and the relation. To confuse perception with conception was to fall back to the philosophical point of view of Leibniz or rather of Wolff, in which time and space were treated as "obscure conceptions" and analysis was substituted for synthesis. It was thus to build up a dogmatic philosophy of mere conceptions without any restraint from experience. On the other hand, to deny the necessary relation of perception to conception in knowledge was to fall into a pure empiricism, which extruded all generality from experience, and which thus was fatal even to empirical knowledge itself. Hence, the only theory which could avoid the dangers seemed to him to be one which recognised both conception and perception as elements necessary to experience, but regarded them still as separate and only externally combined with each other. The possibility that they should be correlative elements which were neither to be separated nor confused did not occur to him; because, on the one hand, he believed that there was an analytic movement of thought in itself apart from perception, and because, on the other hand, he conceived that sensation as such is not only presupposed in our knowledge but actually contributes an element to it—though he recognised that of that element nothing can be said which does not involve its relation to the 'I think' of consciousness, and that all the terms we use, such as the "manifold" or the "series of sensations," really involve that reference. The value of the Kantian theory, however, is just that it maintains a protest against a merely formal philosophy on the one side, and a mere empiricism on the other; and that, while it shows the

necessity of perception to the development of conception, or, in other words, the necessity of experience, it at the same time maintains that that perception is essentially related to the thought from which it is distinguished.

Three points in Kant's doctrine of knowledge.

We see, then, that the essential points of Kant's doctrine are these:—*first*, that knowledge or synthetic judgment always involves perception as well as conception; *secondly*, that in the case of mathematical synthesis both are *a priori*; and *thirdly*, that in the case of dynamical synthesis, though an *a posteriori* element is involved, yet there is a determination of that element through the forms of sense which gives universality and therefore objectivity to that which for perception is merely particular and subjective.

(1) Synthesis involves both perception and conception.

The first of these points has already been made sufficiently plain. It means simply that knowledge or judgment is always an apprehension of the many in the one, of the one in the many, and that neither can be separated from the other except by abstraction. There must be distinction yet unity in the process of knowledge, a distinction which in Kant's view is ultimately referable to the division of the perception of a manifold in space and time from the thought which gathers it into unity.

(2) Both are *a priori* in mathematical synthesis;

The second point depends on the fact that the *a priori* forms of space and time can by themselves be made objects of thought; in other words, that objects may be regarded as they are determined only by relations of space and time and by no other relations. Hence, taking the conception of quantity as our guide, we can make constructions in space and time and the results we arrive at are principles universally valid for all that is presented as in space and time.[1]

(3) but not in dynamical synthesis.

The case is different with the dynamical principles, such as substance and causality. For there we have to do, not with the mere determinations of spaces and times, which can be reached by a construction in pure space and time, and which, when so reached, can and must be transferred

[1] To avoid complexity of statement I do not here refer to the principle of *The Anticipations of Empirical Perception* which have to do with the synthesis whereby the matter of sensation must be united with the consciousness of time, the form of inner sense, in order to make possible the qualitative determinations of objects.

to all objects occupying those spaces and times, but with determinations of phenomena or perceptions, by which they are referred to permanent objects existing in space and time and, as states of such objects, have their relations of co-existence and succession fixed according to universal laws. In other words, these principles refer to objects in so far as they are distinct from the times and spaces they occupy, and yet are determined as occupying them and as in them standing in certain permanent relations to each other. Hence, the dynamical principles not only presuppose an empirical matter of perception, but fix how that matter must be determined, in itself and in relation to all other matters of perception, in being referred to objects known as objectively existent in space and time. Thus, while the mathematical principles presuppose objects determined as in space and time, and authorise us to transfer to them the quantitative determinations of pure space and time, *i.e.*, of the forms under which alone they can be represented, the dynamical principles show us how the data of sense must be determined *in order* to become referred to such objects. In other words, the mathematical principles tell us how objects must be conceived, *if* they are conceived as existing in space and time, while the dynamical principles tell us how the matter of sense must be determined, *in order that* it may be conceived as referring to objects in space and time.

Consequent difference in the deductions of the two forms of synthesis.

In this way the question how *a priori* synthesis is possible breaks up into two questions, how mathematical and how physical, *a priori* synthesis is possible. The answer to the first of these questions is an explanation of mathematical synthesis as a pure process by which experience is anticipated, and a vindication of it on the ground that, when we have separated the *a priori* forms of time and space from the empirical objects which they condition, we have command over those forms and can determine them at pleasure by a process which does not need to be verified by experience, though its results hold good for all experience. In the other case, it is impossible to vindicate any such anticipation of experience in the particular qualitative determinations of it or their particular coexistences and sequences; for we cannot say prior to experience that

we shall have particular perceptions of sight, taste, etc., or that we shall have them in any particular order, as we can work out the particular properties of figures in Geometry. We can, however, lay down certain general conditions under which alone such particular perceptions and their particular relations in time and space can be referred to objects. We can say that if, and so far as, these qualitatively and quantitatively determined perceptions are to be referred to objects in space and time, they must fall under certain general principles which fix their relations to each other. And in this way we can lay down the general principle that all objects of experience must be conceived as permanent substances, the states or accidents of which follow upon each other according to universal laws of causation, and coexist with each other according to universal laws of reciprocity.

Ground of this distinction.

Now, the value of this distinction cannot yet be fully determined. But it may be seen at once that it rests on the idea that our *a priori* determination of objects is limited to the determination by the categories, *first,* of the pure forms of perception, and *secondly,* of the matter of perception through these forms. It is bound up with the idea of the absolute *a-posteriority* of the matter of perception both as to its presence or existence for us in perception, and as to its quality, *i.e.,* its non-quantitative character, (for its quantitative character is given *a priori* through the necessity of its being presented under the forms of perception, which again can be specified or determined only in accordance with the category of quantity). According to this view it is, so far as our understanding is concerned, an accident that there is any matter of perception given, which we can determine as objective or as referring to objects; and it is another accident that that matter should have certain particular qualities rather than others. When, therefore, we go beyond the quantitative determinations which belong to space and time, and proceed to determine anything as *existing* in space and time, and as in space and time standing in certain relations of coexistence or succession, we are able only to anticipate those general principles which are involved in all determination of objects as so existing and related. Thus, *e.g.,* we cannot say when a

special sequence of phenomena will take place, or what phenomena will stand in this relation in time; but we can say that, if the sequence does take place once, it will take place always, whenever all the circumstances are similar; for otherwise it could not be referred to any object in an experience of which time is the condition.

Relations of *Aesthetic*, *Analytic*, and *Dialectic*.

We have now seen how the problem of the *Critique* leads to its main divisions. The *Aesthetic* and the *Analytic* deal respectively with the two elements of knowledge, perception and conception, which are at once *distinguished* and *related*; while the *Dialectic* deals with that discordance between the ideal and the reality of knowledge, which arises from the fact, that the *relation* does not overcome, or is not coincident with, the *distinction*, and that knowledge, therefore, means a combination of elements extraneous to each other. It is, therefore, a combination which does not correspond with the unity of thought or self-consciousness, which yet it presupposes as the condition of its possibility. This dualism appears objectively as the separation of phenomena from things in themselves, which, therefore, have a problematic existence so far as the *Critique of Pure Reason* is concerned. Meanwhile the ideas of these problematic objects have a function in relation to that very experience which they limit and for which they set up an unattainable ideal.

Summary of Kant's views as to the problem of criticism.

If we state the general problem of philosophy in the form in which Kant finally stated it, as the problem of "the possibility of advancing by reason from the knowledge of the sensible to that of the supersensible,"[1] the answer of the Critical Philosophy may be shortly summarised thus. If knowledge of the supersensible is possible, it must be rational or *a priori* knowledge; for only by an *a priori* process can we hope to deal with that which is beyond all sense. But the insecurity and contradictions of metaphysic, the "ruinous disunion of philosophical systems," forbids us to ask *how* it is possible, till we have first settled *whether* it is possible. We turn, therefore, to the question how *a priori* knowledge is possible where it is admitted to be actual, *i.e.*, in relation to the objects of experience. On the other hand, if by

[1] R. I 488; H. VIII. 520.

a recoil of the scepticism, which arises in the region of metaphysics, upon the field of experience, it be denied that the *a priori* principles are valid even in relation to the latter, we are prepared to show that experience is impossible without them, and so to take away the ground from under the feet of the sceptic. At the same time we have to explain that, as pure thought in itself is ruled by the law of identity, its going beyond itself at all must be mediated by perception, and its going beyond itself *a priori* must be mediated by *a priori* perceptions. Hence, where there is no such perception, there can be no such synthesis, and the character of the synthesis will be determined and limited by the character of the perceptions. But our *a priori* perceptions are essentially forms of sense, *i.e.*, they are forms of a matter which is essentially *a posteriori*, and therefore external and alien to the pure intelligence that apprehends it. Hence, neither they nor the matter that falls under them can be brought into perfect unity with the mind that knows them. The mind is never able to consummate the synthesis of its object with itself, and the forms of unity by which it determines sensible objects still leave these objects inadequately determined, according to that idea of knowledge which it carries with itself. Hence it is led to make the distinction of the noumena it can think from the phenomena it can know. But as the former are presented to it in no perception or intuition, it is obliged to recognise that it is incapable, so far at least as theoretical reason is concerned, of rising beyond the problematical existence of the noumena or of turning the thought of them into knowledge.

Do the different parts of Kant's argument contradict each other?

Kant's proof that *a priori* knowledge is real, because without it experience would not be possible, is thus one side of his argument; the other side is that the conditions under which such knowledge is realised are such as are not found except in sensuous experience. And the great question that arises out of the whole process is, whether the effect of it is not to break down that opposition of analysis and synthesis upon which the opposition of phenomena and noumena ultimately rests; or rather to show that that opposition is a relative, and not an absolute, one. Or, to put all in a word, does not Kant, in showing

the limitation of the empirical or phenomenal view of the world, himself point out how that view is to be supplemented and corrected, so as to exhibit to us the world as it is in its reality? Is not the defect of the *Critique* what was indicated in a previous chapter, that it conceals under the appearance of a process of abstraction, by which we rise to a mere analytic unity, a process of 'concretion,' which really is an advance, through a relative unity of unreconciled elements, to a unity of differences which is organic, and therefore, in a true sense *a priori* and *transparent*? If so, we may repeat in a serious sense what has been proposed as a kind of *reductio ad absurdum,* that beyond the problem of the possibility of *a priori* knowledge is the problem of the possibility of the *Critique of Pure Reason.* For so long as there is an unexpressed thought, which is latent beneath the expressed thought, and which secretly governs it, so long we have a right to criticise the expressed thought by bringing into prominence its implicit presuppositions.

CHAPTER II

THE AESTHETIC

Relation of the *Aesthetic* to the *Dissertation*.

IN a previous chapter, we have seen that the main ideas of the *Aesthetic*, in relation to time and space as the forms of perception, were developed by Kant about ten or eleven years before the publication of the *Critique of Pure Reason*, and about two years before he even entered upon the investigation, the results of which are given in the *Analytic*. It is, therefore, remarkable that after so long a period, the *Aesthetic* repeats the corresponding sections of the *Dissertation* with only subordinate modifications. From this it might naturally be inferred that Kant built his new edifice on a foundation which he considered to be immovably established, and which was left untouched by all the subsequent developments of his speculation. This inference, however, would be erroneous. The *Aesthetic*, it is true, remains almost unchanged in form: but this is not because it was still regarded by Kant as in itself satisfactory, but because in the first part of his book he wished to treat one of the aspects or elements of the truth, without being hampered by the necessity of considering its relation to other elements. Thus, he leaves out of account all consideration of the activity of thought, which is necessary to make the manifold of sense an object for the self-conscious intelligence. Nay, in the corresponding section of the *Prolegomena*, he even goes the length of speaking of the science of Mathematics, as if it were dependent only on the existence of formal or pure *a priori* perceptions, and did not also imply any activity of the understanding.[1] Hence, also, he says little

[1] In that section of the *Prolegomena*, he answers the question 'How pure mathematics is possible,' without reference to the necessity of any use of principles of the understanding.

or nothing in the *Aesthetic* of that process of *a priori* construction, that process of thought working through imagination, which he afterwards shows to be necessary both to pure and to empirical perception. As a consequence of this self-imposed limit, he treats time and space and objects in time and space as if they were 'given' to us directly and immediately through sense, in such wise that we can make judgments regarding them without any introduction of new elements by thought. In short, he seems in the *Aesthetic* only to revive the view of the *Dissertation,* according to which all that is necessary to produce experience is that the understanding in its purely formal use should generalise the ideas of perception.[1] Sensibility is represented as a receptivity, not merely of impressions or sensations but of perceptions, as if perceptions could be received without any activity of the consciousness that receives them. And from these perceptions we are supposed to be able to read off at once the characters of the individual objects presented in them, provided we are careful not to make any assertions which go beyond these individual objects.

Different stages in Kant's critical regress.

This method of proceeding upon assumptions afterwards modified was characteristic of Kant and it has undoubtedly some advantages. It has especially the Socratic advantage of meeting the ordinary consciousness on its own ground and leading it by gradual steps to refute itself, and so to discover for itself a deeper basis of thought, the necessity of which it might not otherwise have seen. It is a method which Kant had learnt to use in his University teaching, and one which as Jachmann tells us in a passage already quoted, often exposed Kant to serious misunderstanding from those who took his first word for his last.[2] It may be feared that the misunderstandings to which the hearers of Kant's lectures were exposed, have been fully paralleled among the readers of the *Critique,* who have taken the statements of the *Aesthetic* as final, and have made no allowance for the explicit as well as the tacit corrections subsequently introduced. At the same

[1] He mentions at the outset that there are other necessary elements (A. 21; B. 35), but he does not allow this to affect his statements any further.

[2] See above, p. 60.

time, it has to be admitted that Kant himself was not always careful to work out fully that correction of his first presuppositions which was made necessary by the new principles introduced in his subsequent investigations.

Relation of the *Aesthetic* to the *Analytic*.

The method of Kant has obvious advantages for any one who is prepared, not merely to receive passively the reasoning of the *Critique,* but to rethink the whole process of reflexion by which it was produced, and who, therefore, treats the *Aesthetic* only as the first step in that transformation of ordinary conceptions, which is to be continued throughout the whole work. What, however, probably induced Kant to leave the *Aesthetic* in the form which it has in the *Critique* was not merely his desire to subject the reader to a process of Socratic dialectic and so gradually to lead him on from his own ground to the point to which it was desired to bring him. Nor was it simply the historical fact,—though that may have had some influence,—that Kant had thrown the principles of the *Aesthetic* into the form which they take in the *Critique,* long before he saw the necessity of the further step taken in the *Analytic.* The final reason was that the *Aesthetic* is necessary to make intelligible the very statement of the problem of the *Analytic.* For, as has been shown in the previous chapters, what makes it necessary to deduce, or justify, the objective use of the categories is just that opposition between conception and perception, which it is one main result of the *Aesthetic* to establish. Kant had reached the question of the *Analytic* through a course of investigation which was made necessary by the opposition of thought and sense established in the *Dissertation,* and he did not see how to carry his readers to the same result by any other road.

The *distinction* of sense and thought in *Aesthetic* gives rise to the problem of their *relation.*

According to the principles of the Leibnizian philosophy from which Kant started, the distinction between *a priori* and *a posteriori* coincides with the distinction between knowledge derived from conceptions and knowledge derived from perceptions; and it is a distinction of degree and not of kind, conception differing from perception merely in the distinctness with which the elements in it are separated from each other.[1] Hence space and time were

[1] Cf. above, p. 84.

regarded as being merely confused conceptions of the relations of objects, time corresponding to the conception of dependence, and space to that of reciprocal dependence. So long as this theory prevailed, no difficulty could arise as to the relations of conception to perception, or, in other words, as to the application of pure conceptions to perceived objects; for there could be no difficulty in bringing together elements which were not essentially distinguished from each other. But the argument of the *Dissertation* and of the *Aesthetic* leads to the conclusion that the distinction of conception and perception is not merely one of degree; and that it does not coincide with the distinction of *a priori* and *a posteriori*; but that on the contrary it rests on an essential difference of kind between two faculties, each of which has its own *a priori*: time and space constituting the *a priori* of sense in distinction from the pure conceptions which constitute the *a priori* of the understanding. It is at this point, that the question as to the value or objective application of the pure conceptions necessarily arises; for if by their essential character conceptions are severed from the perceptions through which alone they can be individualised or realised *in concreto,* it becomes necessary to show how, in spite of their opposition to, and disparateness from, these perceptions, they can yet be legitimately applied to them. If it be true that thought has laws of its own, which would lead it, if left to itself, to determine objects in a particular way,—a way which is essentially different from that which it must follow if it is to determine objects through perception,—then we are forced to face the problem of the *Analytic, i.e.,* the problem whether thought can be legitimately used to determine the data of perception at all. And beyond this again arises the question of the *Dialectic,* whether, besides the determination of the objects given in perception,—a determination by the intelligence of a matter which is essentially disparate from it, and in which, therefore, it cannot realise its own idea of knowledge,—the intelligence is able to attain to any other determination of objects which is adequate to that idea.

And this problem takes two forms—in the *Analytic* and in the *Dialectic.*

The *Analytic* and the *Dialectic* cannot, therefore, be understood except from the point of view reached through

the *Aesthetic*. The *Aesthetic* is the statement of a dualism, which is partly overcome in the *Analytic* by the reduction of sense and thought to elements or factors in empirical knowledge. But in Kant's view, this dualism cannot be completely overcome; and the *Dialectic*, therefore, shows us thought recoiling from the imperfect result of its work in experience, and setting up for itself an ideal which with such materials can never be realised. What hinders us from perceiving this is mainly the fact that the *Aesthetic* fully states only one side of the opposition, leaving the explanation of the other side till a later stage. If, however, we connect with the *Aesthetic* the section of the *Analytic* on the '*Amphiboly of the reflective conceptions*,' in which we have a direct criticism of that dogmatic philosophy in opposition to which the theory of the *Aesthetic* was developed, we are able to see clearly how the antagonism there expressed is related to the combination of the opposed elements attempted in the *Analytic*, and the partial reassertion of the antagonism in the *Dialectic*.[1]

The metaphysical and transcendental expositions of space and time.

What then is the main argument of the *Aesthetic*? We have already seen how Kant in the *Dissertation* was led to separate the forms of time and space from pure conceptions on the one side, and from the special matter of sense on the other. They are, he contends, *a priori*, but they are the *a priori* not of thought but of sense, the forms of sensible perception: and it is this view of them alone which is reconcileable with the existence and the nature of the science of Mathematics. This is the general summary of the argument which is divided into the two stages of what he calls the *metaphysical* and the *transcendental* expositions of space and time. The 'metaphysical exposition' shows that they are *a priori* and what kind of *a priori* they are: the 'transcendental exposition' shows that they are a source of *a priori* synthetic judgments, and that this is possible only on the supposition that they are the forms of perception. The metaphysical exposition again is divided into two parts, as it proves that time and space are *a priori* and that they are *perceptions*. Let us

[1] This point will be discussed more fully in the chapter on the Schematism of the Categories.

take up successively these three points (1) that space and time are *a priori*; (2) that they are perceptions; (3) that only as the *a priori* of perception, as the forms of perception, can they explain, and that as such they can fully explain, our *a priori* synthetic judgments in regard to space and time and their development in the science of Mathematics.

(1) Space and time are *a priori*.

1. Space, Kant argues, is *a priori, i.e.*, it is not a general conception abstracted from particular objects previously given in experience: for all reference of sensations to an external object, *i.e.*, to an object which is in a different place from that which I occupy, or in a different place from other objects, presupposes space. In other words, all determination of particular objects as occupying a particular place and standing in a relation of externality to other objects, presupposes space as that in which we place them. The idea of space, therefore, cannot be got from objects as they are given in sense, for these could not be determined as they are except on the presupposition of space. External objects, in short, are primarily determinations of space, and space, therefore, cannot be taken as a mere determination of *them*. An outer experience exists for us only through the idea of space, as that which is necessary to constitute it, and that idea cannot be abstracted from the experience of which it is the condition. It may be said, indeed, that we do not apprehend space before we apprehend objects in it, and this is true. But the question is not of priority in time. Though the spatial condition may not appear except in the determination of external objects, it appears as its logical presupposition. We do not apprehend space and then objects in it, but we apprehend objects on the presupposition of space, and we determine space by objects. Hence also while we can, by abstraction, empty space of the objects which determine it and thereby leave space as the presupposition of an infinite number of particular determinations or objects in it, we cannot invert this process and abstract space, while yet leaving the objects or particular spatial determinations unchanged. Neither in imagination nor in perception can we get rid of space which is the universal condition of both. The same reasoning may be repeated in relation

to time, which is not abstracted from the states of objects that are presented as successive or coexistent, but is the presupposition of the perception of phenomena in those relations, and which we can, therefore, by abstraction empty of phenomena, though we are unable to represent those phenomena as not in it.

Kant's argument directed not against Hume, but against Newton.

Kant's argument is, on the one hand, directed against Leibniz, for whom space and time were confused ideas abstracted from an experience of things which were known in their pure nature and relations independently of and prior to space and time, and, on the other hand, against Newton, for whom space was an objective reality independent of the mind. This explains certain peculiarities in the form of the argument, which are apt to be misunderstood by those who think of it as directed against Hume. It explains, *e.g.*, why the *priority* of space and time is made the main argument for their *a-priority*: for it was the adoption of the Newtonian view of space as prior to objects which immediately led Kant in the *Dissertation* of 1770 to infer that it is an *a priori* form of perception. At that time Kant did not yet question the fact that individual objects as such are given to us in sense through the affections which they produce. But he saw that time and space are forms in virtue of which these objects are arranged, or rather are capable of being arranged, in a certain order in relation to each other. And, he argued that, if this order *is* prior to objects in our consciousness of them, if they present themselves as special determinations of *it*, it cannot be presented to us through the affections in which *they* are given. It must be a form which belongs to the receptivity of sense through which they are perceived.

What shape would the argument have taken if directed against Hume?

If Kant had been thinking primarily of Hume's reduction of time and space to copies of impressions,[1] the argument would probably have taken a somewhat different form. He would have dwelt more upon the impossibility of extracting the ideas of space and time from sensation. He would have pointed out that to say that the object which affects us is 'here' and 'now' present to us will not explain how *we* should be conscious of it as 'here'

[1] As a matter of fact Hume's *Treatise on Human Nature*, in which this reduction was effected, was not known to Kant.

and 'now' present. For we cannot be conscious of the 'here' and the 'now' except as we relate it to other 'heres' and 'nows' and, indeed, ultimately to all 'heres' and 'nows,' *i.e.*, to all space and time; and this implies a synthetic act which brings together the manifold of sense in relation to a permanent self. This line of argument, however, would have involved an anticipation of the *Analytic*, and would have at once forced us to consider the necessity of the pure synthesis of the understanding for the apprehension of space and time as well as of objects in them. But in the *Aesthetic*, Kant still abstracts from all consideration of the spontaneity of thought as distinguished from the receptivity of sense. He, therefore, merely argues that, since the apprehension of space and time is presupposed in that apprehension of objects which alone we can suppose to be given in perception, they must be *a priori* forms with which the sensibility invests its object in the very perception of it, and not themselves due to the presentation of the object in sense.[1]

(2) Space and time are perceptions.

2. The second point which Kant seeks to prove is that time and space are perceptions, not conceptions. His argument is that all the marks by which a perception is distinguished from a conception are applicable to space and time. The object of a conception is universal, of a

[1] Cohen (*Kant's Theorie der Erfahrung*, p. 95) supposes Kant in his first argument to be opposing Hume, because Hume regarded space as an abstraction from the images of perception, which were supposed to present us with coloured points in a certain order, while Leibniz calls space an abstraction only in order to exclude the idea of its independent existence as separated from the monads, and regards the idea of it as an "eternal truth." But Kant was not acquainted with Hume's *Treatise*, in which alone this derivation of space from sensible impressions is given, and on the other hand, he certainly thought that Leibniz, as he conceived space to be a relation of things which presupposed their existence, was logically bound to regard it as dependent upon the experience of those things. This is clearly indicated in the passage where he contrasts the opinions of Newton and Leibniz (*Aesthetic*, § 7; A. 39; B. 57) and in the corresponding passage of the *Dissertation* (R. I. 323; H. II. 407). Since writing the above, I find that in the *Reflexionen Kant's* (II. 347) it is directly stated that "if the conception of space, as Leibniz thinks, were taken from things, propositions relative to space, as being empirical judgments, would not have any apodictic certainty." In the note Dr. Erdmann points out that this proves Cohen's opinion to be mistaken. It may also be pointed out that Leibniz's assertion that the idea of space is an 'eternal truth' is in conflict with his assertion that it is a confused idea.

perception, individual. Now there is only one space and one time: for all special spaces are parts of the one space, and all times of the one time. "They (the parts of space) cannot precede the one all-embracing space as the constituents out of which it may be put together, but on the contrary they can be thought of only as in it." To get a general conception of space, we should need, *first* to limit space in different ways and *then* to abstract from all that is peculiar to any special limitation of it. Such a general conception would, however, contrast directly with the idea of the one space, which is presupposed in all limitations of it, *i.e.*, in all perceptions of special parts of space or of objects in space. For a general conception, such as animal, plant, etc., is no whole in which all special animals and plants are parts, but merely represents the common element present in each and all of them. Space and time, further, are represented not only as wholes but as infinite wholes, *i.e.*, wholes which have an infinite number of parts in them. At least we may go on *ad infinitum* adding part to part without exhausting space, (and we can see from the beginning that we shall never exhaust it,) just as renewed or continued attention to the perception of an object enables us to go on detecting new qualities in it.[1] But a conception is made up of a definite number of marks, which cannot be increased without altering the conception. It may contain an indefinite number of individuals *under* it, but it cannot contain an infinite number of possible determinations *in* it.

The argument is directed against Leibniz.

The argument here given is directed against the view of Leibniz, who had denied the qualitative distinction of conception and perception, and who regarded the difficulties attending the conceptions of space and time as part of the obscurity which necessarily attaches to perception as such. Kant maintains, on the contrary, that while the supposed obscurity does not exist, while perceptions are in their way as distinct as conceptions, yet their distinctness is of a

[1] Cf. *Reflexionen Kant's*, II. 356. "The synthetic judgments regarding space are not contained in the universal conception of it, any more than the empirical judgments as to the composition of gold are included in the general conception of if. In both cases they are drawn out of, or found in, the perception of the object."

different kind, of a kind which makes them incommensurable with conceptions. It was this, in fact, that Leibniz really was aiming at when he spoke of their obscurity.[1] The obscurity consists in this, that the object of a perception is individual and as an individual is considered to have an infinity of determinations which we can never think out to an end, or gather up in a final conception. Hence perception, when it brings such an object before us, offers an infinite problem to conception, a problem which conception can never completely solve. For we can never completely "define the individual." Now such inexhaustible individuality we find in time and space which are "represented as infinite given wholes" and, therefore, as wholes which we can never completely "bring to conception."

In what sense are space and time *infinite given wholes?*

When we put the matter in this way we provoke a natural objection, that the inexhaustibility of perception, or the impossibility of defining the individual, does not mean that once for all the individual in all its determinations is given to us in sense, and that conception then proceeds to analyse it in an endless process. Space and time, no doubt, contain in them the possibility of endless determinations, but only as a possibility, the realisation of which must depend on the synthetic activity of thought. But to speak of these determinations as existing in space and time prior to such activity is to suppose the possibility realised independently of the only activity which for us is capable of realising it. Space and time are not for us infinitely divided but infinitely divisible, not infinitely extended but infinitely extensible. All the determinations of *quanta* which are discovered by the science of mathematics are not determinations existing in pure space and time and given once for all in the perception of them, but determinations which are reached by the constructive effort of imagination guided by thought. In like manner, the individual objects of experience are not given once for all in perception as infinitely determined, but they are continually being determined in the synthesis of percep-

[1] The undividedness and infinite divisibility of the continuous is taken by Leibniz for the confused representation of a divided aggregate of separate monads. Cf. Introduction, Ch. III. p. 81.

tions, which we bring together in thought and refer to identical objects. It is true that in this process we seem to ourselves to be discovering the properties of objects, which exist independently of the process by which we discover them and which in all that process we can never exhaust; but it would be absurd to say that all that we discover is already given in the perception by which the object is first presented to us. Rather, we must regard that perception as itself a step or element in the process of determination of an object, which is not *perceived,* any more than it is *conceived,* in its completeness. And the facts of the case would be more truly expressed by saying that we are guided in the whole process of experience by the idea of an object to the complete determination of which, in the continuous synthesis of perceptions under conceptions, we are continually approximating but can never attain. The synthetic process does not, therefore, consist in continually taking more of what is given at the first in perception, but in continually bringing together new perceptions, in reference to an object thought as identical.

Kant's own correction of the view of the *Aesthetic.*

Now, it is certain that this view of the process of knowledge, was not overlooked by Kant. It is, in fact, the very view which later on in the *Critique* he himself sets before us. The *Aesthetic,* indeed, tells us that space "is represented as an infinite given whole," and seems to imply that it is given as such in perception, but the *Dialectic* shows us that such a representation is simply an 'idea,'[1] *i.e.,* the thought of something which can never be given in perception any more than it can be brought to a unity in conception. In the *Aesthetic,* however, Kant deliberately abstracts from the process of thought and imagination, and treats of perception as if it were not a process, but a passive reception of the result of the process. And he even erases some expressions in the first edition in which the former view had escaped from him: for while in the first edition he had said that "if it were not that the process of perception is limitless, no conception of relations could carry with it a principle of their infinity," *i.e.,* not that we have a perception of the space containing all its determinations but that we have in it a potentiality of

[1] A. 427; B. 456 *note.*

them: in the second edition he says merely that "no conception as such can be thought as containing an infinite multitude of ideas in it," as if space as a perception were supposed by him to contain such an infinite multitude. Kant, in fact, is determined to make us follow him step by step, and, therefore, he treats for the moment the infinite potentiality of determinations, which belongs to the individual as an object of perception,—though really belonging to it merely as an object which we represent as the same in the synthesis of many perceptions,—as if it were actually realised in the first immediate perception of it; or at least as if in that perception all these determinations were at once present, though the mind may need a long and even endless process to make them explicit or 'bring them to conceptions.' And the reason why he does this seems to be, that he wishes, in the first instance, to refute the Leibnizian view of space and time, as conceptions, assuming provisionally the ordinary distinction made between perceptions and conceptions. A conception, so to speak, is a certain definite amount drawn from the inexhaustible bank of perception: it is the combination of a certain definite number of marks. Hence no conception will afford matter for an indefinite process of analysis. If space and time were, as Leibniz said, 'obscure conceptions,' their obscurity at a certain definite point must vanish before analysis: for, at that point, we should get down to the simple elements of the combination. But we can see that this is impossible in the case of time and space in so far as they are "represented as infinite given wholes"; which, therefore, cannot be analysed into a finite number of parts, or regarded as compounded out of these parts.[1] For Kant's immediate purpose it was not necessary to observe that the ideas of time and space as continuous *quanta* contain only the potentiality, and not the actuality of such infinite determination. That we can see that there is no limit to the possibility of their determination is, from the point of view of the *Aesthetic*, the same thing with their being actually determined in all

[1] "No conception as such can be thought of as if it contained an infinite number of ideas in it. But space is so thought: for all parts of space *ad infinitum* exist at once." B. 39.

the infinity of their extent and division. For in any case the determining process presupposes space and time and does not produce them, any more than it produces the individual things which are given in perception as in space and time. In this point of view, there seems to be a special force in the words "*represented* as given." The ordinary consciousness represents both as given in all their infinite completeness of determination, and regards all the process of thought by which the special determinations are discovered as one of simple analysis of what is given. Now an 'infinite whole' cannot, as Kant afterwards shows, actually be 'given,' any more than any other individual object in the completeness of its individual determination can be given. Determination of space and time and of individual objects in space and time can take place only in a successive process of synthesis in which the mind must be guided by a definite conception or rule. At the same time, in this successive process we always presuppose the totality of determination of the object in itself, as the goal towards which in our synthetic process of thought we are tending. While, therefore, the progressive determination of the object appears on the one hand as a synthesis, proceeding *a parte ad totum,* which is never completed: on the other hand, it is equally true that the idea of the whole, as that in, and in reference to, which the part is determined, is implied in the process from the first, and gives to it its interest and direction: and in this point of view knowledge may be said to proceed *a toto ad partes*. This idea of the whole, however, we do not *determine*; in Kantian language, we can never make it an object of knowledge. But the thought of it is the presupposition of all our efforts in determining such objects. The unity of all experience, of all objects with each other and with the mind that knows them, is, so to speak, the horizon within which all special objects are determined, and we can see it as the limiting condition of all knowledge but not as itself an object of knowledge. From this point of view all our progress in knowledge may be regarded as a specification or differentiation of a presupposed whole, and not as an integration of part to part without any limit. It is this idea of a presupposed

totality, within which our experience grows, which appears in the *Aesthetic* as the representation of space and time as 'infinite given wholes,' by limitation of which particular places and times (and objects as occupying these places and times) are determined.

The full explanation of these ideas cannot yet be given. Enough, however, has been said to explain the fact that so soon as, at the opening of his *Analytic,* Kant goes beyond the common view of knowledge as the analytic recognition of the different elements involved in the complete determination of things as given in sense,—so soon as he begins to recognise that a spontaneity of thought is necessary in the first instance to connect the elements which are afterwards separated by analysis,—at that moment the idea of a given totality disappears and has to be replaced by the idea of a totality which can be *thought* but can never be *given,* or even reached by the immediate synthesis of that which is given. Something more will be said on this subject at the end of this chapter.[1]

(3) This view of space and time explains the possibility of mathematical science.

The third step, which Kant takes in the "transcendental exposition," is to show that time and space are principles of an *a priori* synthesis which carries us far beyond the determination of time and space itself, and that this could not be possible unless the conception of time and space as the *a priori* of perception were true. A 'transcendental' view of any idea is, as Kant explains, always one which transcends or carries us beyond the use of it in which we know, or suppose ourselves to know, an object through it, and makes us consider how such knowledge

[1] It is obvious that we have here the idea of a unity of experience presupposed in all special determination of objects, an idea which in the *Critique* takes the place held by the idea of God in Kant's pre-critical philosophy. Accordingly, in the third section of the *Dialectic*, Kant attempts to show the illogical nature of the process by which the Ideal of reason, which in reality is merely the "regulative unity of experience," is first realised, *i.e.*, turned into an object, then hypostasised, and finally in the natural progress of reason to the completion of its unity, personified (A. 583; B. 611 *note*). In the doctrine of the *Dissertation* we have a link between the two ideas in the conception of space and time as *Omnipraesentia Phaenomenon* and *Aeternitas Phaenomenon.* Throughout Kant conceives the universal (*i.e.*, not the abstract universal but the universal as the principle of a systematic whole) as the presupposition of the particular, though this is modified by the identification of the former with the *a priori* element in the consciousness of the subject.

is made possible by the constitution of the faculty of knowledge in the subject. It has, therefore, to do with the *a priori,* the necessary and universal elements in knowledge, or with the other elements only so far as the former elements presuppose them. In the transcendental Deduction of the categories, *a priori* conceptions are shown to be necessary to determine the form and matter of perception, so as to produce experience or knowledge of phenomenal objects. In the 'transcendental exposition' of the *Aesthetic,* Kant does not look either so far back or so far forward: he does not show the necessity of *a priori* conceptions to determine the forms of space and time, nor does he show that this determination is that which alone can constitute knowledge even of empirical objects. All he does is to point out, *e.g.,* that in Mathematics we do "determine the properties of space and of time synthetically and *a priori,*" and thus attain to a knowledge of all objects in space and time—a knowledge which is not and cannot be derived from an empirical consideration of those objects, but anticipates it and lays down universal and necessary laws for it. On the other hand, he argues that such synthesis would not be possible unless space and time were perceptions; and it would not be a necessary synthesis, *i.e.,* a synthesis accompanied with the consciousness that the elements which it combines are necessarily and universally combined, unless they were *a priori* perceptions. For that must be a perception which amplifies a conception or gives it means to amplify itself. And that perception must be *a priori,* or involved in the very constitution of the faculty of perception, which enables us with apodictic certainty to anticipate actual perception and lay down laws for it.

How mathematical science can anticipate experience.

In this argument, as has been already indicated, the precritical theory of perception is not yet essentially changed. Objects are supposed to affect us and produce a perception of themselves as individual objects. But from this perception we cannot draw any conclusions which go beyond the particular objects, or rather the particular phase in which the objects present themselves to us in each particular case. So far as we know the object through the affections of sense, we know merely that it has affected

us in a particular way; but whether it will ever do so again we know not. We know nothing of the object in itself, but only the appearance which it has for us through a particular affection, and hence we cannot say anything as to the constancy of that relation of the object to our sensibility which is involved in its producing that particular affection. The object is for us the objectified sensation and not the thing that produces the sensation, and the sensation is merely a particular state of our sensibility. If we are able to say anything about such an object which holds good universally and necessarily, it must be, not because of the affection, but because of the nature of the sensibility into which the affection is received and in which it becomes transformed into a perception of an object. Necessity and Universality, therefore, cannot be the effect of the object upon us; they must be the result of the form with which perceptions invests its objects. Hence we are able to say not only that, if there is any universal and necessary element in perception, it is derived from the form of perception, but also that, if there is any knowledge derivable from the form of our perception, it must be necessary and universal, *i.e.*, must equally affect all objects that are perceived by us. Geometry, *e.g.*, as a synthetic *a priori* science is possible, if space is the form of all our perceptions of external objects: and if space is such a form, then Geometry, as the science in which principles of spatial determination in general are developed, must consist of synthetic *a priori* propositions, in which with apodictic certainty laws are laid down for all objects in space. What is universal and necessary in the determination of objects is due to the nature of the subject for which they are, seeing that the object, as Kant naïvely expresses it, cannot 'pass over' into our minds, but only affect our sensibility; and the particular affections which it produces cannot warrant any conclusions beyond themselves.

How far does the *Aesthetic* modify the ordinary dogmatic view of things?

It is obvious that such a view does not in itself imply a complete awaking from "dogmatic slumber"; for it does not yet raise the question what is meant by an 'object' of perception, or how far an 'object' can exist for a consciousness which is merely receptive and which

does not go beyond particular affections so as to combine them in one conception. The *Dissertation,* of which the *Aesthetic* is little more than a repetition, took its start from the naïve belief that individual objects of perception, as such, may be given through the affections of sensibility which they produce; and it modified that belief only so far as to point out that those individual objects are perceived as special determinations of time and space, and that time and space, therefore, are prior to all other elements of perception. *A priori* knowledge is knowledge which conditions, as opposed to *a posteriori* knowledge which constitutes, the perceptions of the individual objects through sense. Kant does not yet attempt to show that it is just the subjection of the particular element in sense to such universal and necessary conditions which makes us refer them to objects. But when he points out that they are in themselves merely particular and contingent, he prepares the way for such a proof. And in the *Prolegomena,* where he does not follow the same strict method of evolving knowledge from its elements, he already anticipates this kind of 'deduction' of space and time.[1] For there he argues that his view of space and time is so far from reducing them to illusions that it is the only view which enables us to prove their objective reality: seeing that objectivity and determination by universal and necessary principles are one and the same thing. The full development of this thought, however, following Kant's synthetic method in the *Critique,* we must postpone till we come to consider the deduction of the Categories in the *Analytic.*

Empirical reality and transcendental ideality of space and time.

Kant's discussion of the nature of time and space in the metaphysical and transcendental expositions he now turns to account to answer the question with which he had begun: "Are space and time real things? Are they qualities or relations that attach to such things apart from our perceptions of them? Or are they *a priori* and due to the subjective constitution of the perceptive faculty?" In saying that certain ideas are *a priori,* Kant might mean to oppose either the doctrine that they represent objects and qualities of objects independently of the manner of

[1] *Prolegomena,* § 13, Remark 3rd.

their apprehension by us, or the doctrine that our apprehension of them is due to sensation. But it is the former opposition which Kant has in view in the *Aesthetic*, as is evident from the argument which we have already considered. The priority of space and time to objects, *i.e.*, the fact that objects presuppose time and space and appear as special determinations of time and space, was what first proved to Kant's mind that the mere presentation of objects to sense could not bring with it, or have consequent upon it, the consciousness of their temporal and spatial relations, but that that consciousness must be a contribution of the mind in perceiving them. "Neither absolute nor relative determinations of things could be perceived before the things to which they belong are presented to us: hence they could not be perceived *a priori*."[1] Hence time and space, which *are* perceived *a priori*, are not such determinations, and they must disappear "whenever we abstract from the subjective conditions of perception." If space or time were taken as a thing which "subsisted for itself," or, in the language of Spinoza, a *res completa*,—an objective somewhat independent of our ways of perceiving,—we should have in it a strange problematical existence (an *Unding*), "a something which though not a real object was yet real"; in other words, an order or form of arrangement for things in relation to each other existing without any objects to be arranged.[2] If it were taken as an attribute or relation

[1] A. 26; B. 42.

[2] Cf. Kant's answer to the objection of Schultz, who asked why space may not be regarded as a true intellectual intuition or perception and as therefore objective, (in letter to Herz dated 20th February, 1772. R. XI. 30; H. VIII. 692.) In the *Dissertation* which Schultz was criticising, it will be remembered that space is regarded as the form in which the reciprocal connexion of all individual substances in this world, due to their common dependence on God, is represented in our sensible perception of them, *i.e.*, it is *Omnipraesentia Phaenomenon*. In the *Critique* the centre of unity in knowledge is changed from God to the conscious self: and we might, therefore, say that space is the form which in our sensible perception is taken by the connexion of all known substances due to their common dependence on the unity of the self that knows them. The same remarks *mutatis mutandis* might be made of time, which in the *Dissertation* is *Aeternitas Phaenomenon*, and in the *Critique* comes to be the form which in our sensible perception is taken by the causal dependence of the changes of known substances due to their relation to the unity of the knowing self.

attaching to such a thing, it and its properties could not be determined *a priori,* but only empirically perceived in the thing of which they were the determinations. Hence it is only 'from the point of view of a man,' *i.e.*, of a being who has such a sensibility as ours, that we can talk of space and of extended things, or of time and events happening in it. In both cases what we have before us is not reality in any ultimate sense, but reality as it appears to us under our forms of sense, *i.e.*, phenomenal reality. Space is the form of outer sense or "a necessary condition of all relations in which objects are perceived as external to us." Time is the "form of inner sense, *i.e.*, of our perceptions of ourselves and our inner states. It cannot be a determination of external phenomena: it belongs neither to figure nor position, etc., but determines merely the relation of ideas in our inner state." "Yet as all ideas, whether they have external things for their object or not, nevertheless as determinations of the mind belong to our inner state; and as this inner state falls under the formal condition of inner perception, *i.e.*, of time, time is a condition of all phenomena—immediately of internal, and mediately also of external, phenomena." Hence we cannot say that all things are in time or in space, but we can say that all phenomena, *i.e.*, all things as they present themselves in perception to us, are in time, and all external phenomena are also in space. This is expressed more formally by saying that time and space are *empirically real* and *transcendentally ideal; i.e.*, real in as far as they are the forms under which objects are presented to us in sense, real from the point of view of the ordinary consciousness or of experience, but ideal when we look at them from the point of view of that distinction between things in themselves and things for us, which a critical view of the faculty of knowledge forces us to make.

Distinction of primary and secondary qualities as maintained by Kant.

The "ideality" of space and time means their subjectivity. At the same time we must distinguish it from the subjectivity of tastes, sounds, colours, the secondary qualities of matter which were already referred by Locke to the subjective constitution of our special senses, in opposition to the primary qualities which were conceived to belong to things in themselves. Kant admits the dis-

tinction between primary and secondary qualities, but changes its meaning. It ceases to be a distinction between qualities which belong to things and qualities which indicate the "subjective nature of our sensibility": for in that sense both primary and secondary qualities are subjective. But it remains as a distinction between that which is universal and necessary in perception, because due to the very form of perception, and that which is particular and contingent, because due to the special affections we receive from the objects. And Kant even suggests,—what, however, if fully developed, would anticipate the argument of the *Analytic*,—that these affections would not of themselves give rise to any consciousness of an object at all. They are "mere sensations and not perceptions, and therefore do not give rise to any knowledge of an object, least of all to an *a priori* knowledge of it." "We must be careful, therefore, not to illustrate the ideality of space (and time) by examples which are utterly insufficient. Thus when it is said that colours, tastes, etc., are not to be regarded as qualities of things, but merely as changes in our subjectivity, that which is originally nothing but a phenomenon, *e.g.*, a rose, is taken for a thing in itself in an empirical sense, though it may yet appear differently in respect of its colour to different persons." Thus such 'a thing in itself in an empirical sense'[1] must from a transcendental point of view be regarded as merely an appearance, inasmuch as it is perceived in space.

Lambert's objection to the ideality of time.

Having thus expounded his doctrine, Kant proceeds to give some further illustrations of it and to meet some objections that had been taken to it. Lambert had objected to the doctrine of Kant in relation to time, that it seemed to imply that there is no such thing as change. Now, even if we reduce *external* changes to appearances, we are directly conscious of changes of our ideas, changes which are real, and involve the reality of time as the presupposition of change. Kant answers that the *Critique* does not imply a denial of the reality of the changes which we recognise as taking place in our mental states when we make ourself an object. But it points out that, because

[1] A noticeable expression.

that reality is apprehended by us under a special form, it cannot be known by us except as a phenomenon. "If, however, I could perceive myself or any other being could perceive me, without the condition of sensibility, then those determinations which we now represent as changes, would be known by us in a way which did not involve the idea of time, nor, consequently, the idea of change." The reason, however, why the doctrine of the ideality of time had seemed a hard doctrine even to those who could admit without difficulty the ideality of space, was that the doctrine of the ideality of time affected inner experience, of which time is the form. Now, it was generally supposed that, while external things are known by us only indirectly through the inner states which they awake in us, these inner states themselves are known directly and immediately. While, therefore, we may admit a doubt in regard to the reality of the former, we cannot admit any doubt in regard to the reality of the latter. This, however, rests on a misconception as to the nature of our knowledge of ourselves and our inner states. We do not know ourselves as we absolutely are, but only as we appear to ourselves under the form of time. In the case of internal, as in the case of external, experience, we must draw the distinction between the phenomenon and the thing in itself or noumenon; and we must remember that while we can think the noumenon, we can know only the phenomenon. The value of this answer will be considered hereafter in connexion with the relations of inner to outer sense, a subject which requires for its full discussion many of the conceptions of the *Analytic*. Here it is sufficient to point out that, if outer sense implies that we are affected by things in themselves, which are not known to us except through the affections they produce, inner sense implies that we are affected by ourselves; and that in neither case do we know that which produces the affections except through the affections it produces, and under the characteristic *a priori* forms which they receive in being perceived. In both cases the form of arrangement of the data of sense in relation to each other is presupposed and not itself given through the affection: so that, even if we could suppose the affections in themselves to correspond to the

objects producing them, (which involves an absurdity,) yet the form of arrangement would itself introduce a discord between them. There is, indeed, this difference between inner and outer perception, that the object of the former is designated or marked out for us by pure apperception or self-consciousness. But as this apperception tells us only *that* we are and not *what* we are, it does not affect the question of knowledge.

Relation of Kant's doctrine to the views of Leibniz and of Newton respectively.

Kant then goes on to illustrate the doctrine of the empirical reality and transcendental ideality of time and space by considering the light it casts upon the controversy as to the nature of space and time, in which Clarke appeared as the representative of the Newtonians in opposition to Leibniz. That controversy was not decisive in its result, because each side was able on its own theory to explain a part of the characteristics of the ideas in question, but neither was able to explain the whole of them. The strong point of the Newtonians lay in their upholding the priority of space: for this, as we have seen, enabled them to explain the possibility of mathematics as a science which lays down *a priori* laws for all perceptions. As all objects, according to this theory, are contained in space and time, so we can understand that what is proved in relation to space and time holds good for all objects. But then, in so far as time and space are taken as existing in themselves, *i.e.*, apart from the relation of things to our faculty of perception, these advantages are purchased at a great cost. For, in the first place, what are we to make of the objective existence of what after all are but forms of relation, prior to and independent of any things related—"two eternal and infinite nonentities existing without anything actual being there, in order to embrace all that is actual within them?" How can we think of an infinite possibility of relations as an actuality subsisting by itself? In the second place, even if we set aside this difficulty, we shall be obliged to treat time and space as conditions of the supersensible as well as of the sensible, which is equivalent to the denial of the existence of anything supersensible whatsoever. For then we fall into the "dangerous dilemma," spoken of by Berkeley, of supposing "either that space is God, or

that there is something besides God which is eternal, uncreated, infinite, indivisible, immutable."[1] Are we to "bind God in matter or diffuse in space"? It was in the attempt to escape from such a result that Berkeley was led to reduce both space and extended substance to illusive appearances. Thus the supposition of the transcendental reality of space which is adopted by Newton, leads inevitably to the denial of its empirical reality; and the only way to save the latter is to say that space is transcendentally ideal. And this leads us to recognise the element of truth contained in the views of Leibniz, who discovered the subjectivity of time and space and thereby avoided the objections which have been just stated. Leibniz, however, exposed himself to equally strong objections on the other side, by misconceiving this subjectivity as a mere "confusion" introduced by sense into our ideas of the relations of things. For this view implies that space and time are not *a priori,* (because not prior to, or presupposed in, the perception of the things in question,) and makes it impossible to explain how mathematics can derive from them universal laws for perception. In other words, it explains the limitation of mathematics to experience only on a principle that destroys its *a priori* character.

Summary view of Kant's doctrine.

Let us, then, recapitulate Kant's results, remembering always the assumption on which they are reached, viz., that individual objects are presented to us in sense. On that assumption it is argued that space and time are presupposed in the objects of perception; for such objects, if external, are represented as in space and time, and, if mere modifications of mind, they are represented as in time: and this means that all such objects appear as special determinations of space and time. Hence space and time cannot be given in the perceptions of these objects, but are *a priori* conditions of such perceptions. Space and time, further, are related to the special objects perceived, not as general ideas under which they are subsumed, but as individual wholes, of which *their* individuality is a limitation or determination. They, in fact, exist for us as individual objects only as we make

[1] Berkeley, *The Principles of Human Knowledge,* § 117.

a special construction in space and time, which, as all-embracing, individual wholes, are presupposed in that construction. And this enables us also to understand why a science, which anticipatively, *i.e.*, without waiting for objects to be given, determines or limits space and time in various ways, or, in other words, makes arbitrary constructions in them, should yet supply us with universal principles which are necessarily applicable to all objects of perception. At the same time it is obvious that such objects,—objects the determination of which is reached by such an *a priori* process,—cannot be regarded as things in themselves, or objects independent of all relation to our subjectivity. They can only be objects as they are for our perception, not objects as they are in themselves; they can be only phenomena and not noumena.

Trendelenburg's attempt to escape Kant's dilemma.

This argument is not susceptible of attack, if we admit its presuppositions. Trendelenburg, indeed, seemed to make a plausible criticism on Kant's view when he objected that the dilemma set up in the *Aesthetic*, between the objectivity and the subjectivity of space and time, is not an exclusive one. For why, he asked, should they not be both objective and subjective at once? Why should they not be *a priori* possessions of the mind, and yet at the same time elements of knowledge, not merely of phenomena, but of things in themselves? Kant's dilemma is thus defective: for it does not cover the whole field of possibility. To this the simple answer is that the alternative supposed to be overlooked is excluded by the very way in which the problem is stated by Kant. Kant, in fact, starts with the supposition that individual objects are given through affections of sense which they produce, and argues, in the *first* place, that, because they are so given, the space and time in which they are given is their presupposition, a presupposition which must be due not to the affections but to the nature of the receptivity of sense in which they are given; and in the *second* place, that this *a priori* subjectivity or ideality of time and space explains how universal and necessary principles applicable to the objects of sense may be developed by mathematical science. Space and time and their *a priori* determinations can be empirically real only because they

are transcendentally ideal. If, on the other hand, they were transcendentally real, if they belonged to the things in themselves which produce our sensible affections, they could be known to us only through the affections of our sensibility, and, therefore, only in their contingent individuality: in other words, the knowledge we have of them would refer to nothing but the individuals actually perceived in the moment when they are perceived, and could have no value as a universal and necessary principle of perception. Mathematics could not anticipate empirical perception by *a priori* construction, nor could time and space be the presuppositions of our perceptions of objects. It appears, therefore, that, on Kantian principles, the transcendental reality would necessarily imply the empirical ideality of space and time, *i.e.*, would imply that time and space and all their *a priori* determinations are illusive; and, on the other hand, that their empirical reality can be based only on their transcendental ideality. But Trendelenburg's supposition, that space and time may be both 'subjective' and 'objective,' can mean only that they may be both empirically and transcendentally real at once, *i.e.*, it involves a pre-established harmony between the things as they are and the necessary subjective forms under which they are perceived—a supposition which, as Kant repeatedly points out, is absurd, because it supposes us to transcend a distinction which at the same time we admit to be for us absolute, and to know that which, *ex hypothesi*, is out of consciousness. "What," he asks, "should I need in order to avoid the idealising of space? It is obvious that I should need to say, not only that the idea of space completely corresponds with the relation which our sensibility has to objects, which is what I *have* said, but that it is in all points like the objects themselves. But this is an assertion to which I can attach no meaning whatsoever, any more than I can attach a meaning to the assertion that the sensation of redness is like that quality of cinnabar which excites the sensation in me."[1]

Impossibility of escaping it on Kant's presuppositions.

The "third course" of Trendelenburg was, therefore, not overlooked by Kant; it was excluded by the necessity of his argument. The *priority* and *a-priority* of time and

[1] *Prolegomena*, § 13, Remark 2nd.

space are essentially inconsistent with any view of them as conditions or attributes of things in themselves. This is a conclusion which Kant could not escape, except *either* by denying the reality of things in themselves, *or* by asserting that the objects of sense are such things. But, if the latter alternative were adopted, the priority of the knowledge of the conditions or possible relations of such objects to our knowledge of the objects themselves seemed to him inexplicable; while, if the former were adopted, the *a-posteriority* of our knowledge of the objects and its dependence upon sensible affections became inexplicable. No doubt a step was taken by Kant to escape the latter difficulty when he pointed out in the *Analytic* that through these affections, apart from the synthesis of the understanding, objects are not presented to us as such. For, if the reference of affections to objects is due to the spontaneity of thought, that spontaneity must itself enable us to grasp the objects to which it makes us refer the affections. But this only extinguishes the opposition in one form to make it reappear in another: for the objects thus reached by the synthesis of the given matter of sense under the form of sense, do not correspond to the unity of thought from which they receive their determination, a discord which necessarily gives rise to the opposition of noumena (*i.e.*, of the ideas of objects that do so correspond) to the phenomenal objects actually apprehended through the determination of sense by thought. It appears, therefore, that there was no way for Kant to determine the forms of space and time as at once empirically and transcendentally real (which is what Trendelenburg must here mean by objective and subjective), except one which involved a surrender of his fixed distinction between conception and perception, between the spontaneity and the receptivity of the mind. For only by such a surrender would it have been possible to reach the identification of the noumenal objects of pure thought with the phenomenal objects in space and time, or even the reduction of the distinction between them to a relative distinction (so that phenomena should be seen to be noumena imperfectly apprehended, and noumena to be only phenomena perfectly understood). But such a solu-

tion of the opposition between phenomena and noumena, as respectively 'subjective' and 'objective,' or in Kant's language, empirically and transcendentally real, could not be realised by him even from the point of view of the *Analytic*, and from the point of view of the *Aesthetic*, the very idea of it lay beyond the horizon. For so long as objects as such are supposed to be given to the passive mind through the affections of sense, it is an absurdity to suppose that they can be known as they are in themselves, and a double absurdity to suppose that they can be known in themselves *a priori*.[1]

Change of point of view in the *Analytic*.

We have now to consider how the point of view of the *Aesthetic* changes as we pass to the *Analytic*, or, in other words, to point out the defects in the theory of the *Aesthetic*, which the *Analytic* seeks to supply. In order to do this, we have to anticipate the answer to two questions: (1) how, in Kant's view, do sensations give rise to perceptions? and (2) how do perceptions give rise to knowledge of objects?

How do sensations become perceptions?

When it is said that "objects are given through sense," or that they are "given in perception," what does this mean? According to the ordinary view from which Kant started, it would mean that individual objects in their complete determination as individuals are presented to us through affections of sense without any activity of thought, and that all that thought can do is to dissect or analyse them. In the *Aesthetic*, as we have seen, Kant does not disturb this view except to point out that individual objects are presented to us in space and time, and are thus invested with an *a priori* form in becoming the objects of our perception. Sense is a mere receptivity of perceptions which, however, are subjected to its own form. At the same time, Kant does not overlook the distinction between sensation and perception, and his words are such as to show that the idea of passive reception could be strictly applied only to the former. For while sensation is described as "the effect of the object upon the mind in so far as we are affected thereby," perception is said to "refer to the object." The same distinction is implied

[1] Cf. E. Arnoldt, *Kant's Transcendentale Idealität des Raumes und der Zeit*, where this subject is very thoroughly discussed.

in the description of sensibility as "capacity of acquiring ideas of objects through the manner in which we are affected by them"; and again when space is said to be the "formal constitution of the subject, in virtue of which it is affected by objects and acquires thereby an immediate idea or perception of them."

Is it by means of the forms of perception alone?

But it may be said that it is implied in such language that the forms of sense of themselves are sufficient to combine the manifold elements of sensation so as to produce a perception of objects. Sensations in themselves, it may be allowed, are "perishing existences," which, for a being that merely feels them, would have no relation, and certainly no necessary relation, to each other, and would therefore be incapable of being referred to any object. But the forms of sense are forms of synthesis. As the sensations are received, they arrange themselves, or are arranged by means of these forms, in an order of coexistence and succession in space and time; and the combination thus produced is all that is necessary to turn them into perceptions of objects.

No; for these forms require a synthetic though *unconscious* activity of understanding to make them perceptions:

To this it must be answered in the first place, that time and space as *forms of perception* are not yet *perceptions* of time and space, "represented as infinite given wholes" in which objects are or may be arranged. Space and time do not exist, even as "objects of perception," apart from the spontaneity of thought by which their manifold elements are brought to unity: for "the combination of the many in one can never come into our minds through sense, nor can it be contained in the pure form of sensible perception and introduced along with it. It is an act of mental spontaneity; and, as we call this spontaneity understanding to distinguish it from the receptivity we refer to sense, so all combination, be it conscious or unconscious, be it a combination of the manifold elements of perception or of different conceptions, and in the former case, be it a combination of pure or of sensible perception, is an act of the understanding. To this act we give the general name of synthesis in order to indicate definitely that *we can represent nothing as united in the object unless we have first ourselves combined it*, and that of all ideas combination is the one which cannot be given by objects

but must be developed by the subject itself because it is an act of its self-activity."[1] There is, therefore, necessary to the genesis of perception as such, as opposed to sensation on the one hand and to the mere forms of sense on the other, an activity which Kant attributes to the understanding: though not to the understanding in that *conscious* activity which is manifested in the application of the categories, but in an *unconscious* activity, to which he gives the name of imagination. And Kant warns us, therefore, that in the *Aesthetic* there was an important omission, which requires to be corrected, ere we can see the true relation of perception to conception and the way in which they combine in knowledge. "Space represented as an object, as is necessary in the geometrical determination of it, contains more than a mere form of perception, to wit, the combination or integration of the manifold given in the form of sense into a *perceptive presentation*; so that, while in the *form of perception* is given only the unconnected manifold, the *formal perception* is the consciousness of the manifold as a unity. In the *Aesthetic* I referred this unity to sense, but by doing so, I meant only to indicate that it is a unity which precedes all *conception*. It is, in fact, the product of a synthesis, which though it cannot be attributed to the senses, yet must be achieved before any conceptions of space and time can become possible. For it is by means of the unity of *a priori* perception, which is due to the direct determination of sensibility by understanding, that space and time are at first given as perceptions. Hence it is correct to refer it to space and time as perceptions, and not to the conception of the understanding."[2]

and the perceptions so produced are not yet knowledge without a further *conscious* activity of understanding.

The unity of time and space as pure perceptions, as well as of all empirical perceptions as such, must, therefore, be accounted for by a direct action of understanding upon sense, which is prior to any application of conceptions, even of the *a priori* conceptions, to these perceptions. But this is not all. This direct action of understanding upon sense, which produces the images of perception, is an activity that transforms the sensations, the proper data of sense upon which it acts, into perceptions. But

[1] B. 129, § 15. [2] B. 161 *note*.

it is a 'blind' or unconscious activity: and it does not, therefore, give rise to any intelligent consciousness of things. It sets appearances before us, but does not enable us to refer them to objects as such. We talk of 'objects of perception,' but perception, as Kant says, in itself is 'blind,' and its images do not *for it* represent anything. Apart from conception, it would be "for us as thinking beings as good as nothing." What it would set before us would be at best a mere "Gewühl" or chaos of appearances, flitting before the mind's eye, but without our being able to fix them to anything, a "blind play of images, *i.e.*, less than a dream." The same idea is expressed with great emphasis in a letter of Kant to Herz (dated 26th May, 1789), in which he tries to answer some of the objections of Maimon. Without the application of the pure conceptions of the understanding, he there declares, "the data of sense would never set any object before me, nay they would not enable me even to attain that unity of consciousness which is required for the consciousness of myself, as an object of inner sense. I could not be capable of knowing even that these data of sense are presented to me, and consequently for me as an intelligent being they would be absolutely nothing at all. It is true that, if in thought I make myself into an animal, I can conceive sensible ideas to carry on their regular play in my soul, seeing that they might still be bound together according to an empirical law of association and so have influence upon feeling or desire. This I can conceive, if I suppose myself to be conscious of every single idea, but not conscious, by means of the synthetic unity of apperception, of the relation of those isolated ideas to the unity of the conception of their object: but then I should not through these ideas have knowledge of anything, even of that state of myself which the ideas imply." [1]

Conception necessary for knowledge.

The passage I have just quoted introduces some conceptions which we are not yet in a position to appreciate fully. But we can see the general idea that underlies it. It is that mere sense, or even mere perception, can give rise to no consciousness of an object as such, any more than it can give us a consciousness of self as such. A

[1] R. XI. 57; H. VIII. 714.

mere animal, (if, without dogmatising as to what kind of consciousness animals in fact possess, we understand by an animal a purely sentient being,) cannot have anything like what we call knowledge. Its inner life is a series of fleeting states, which it does not combine according to universal principles, and which, therefore, it does not refer to permanent objects distinct from the passing states through which they are known. And for the same reason, it cannot be conscious of itself in opposition, yet in relation, to those objects. It is true, indeed, as Kant admits, that the sensuous consciousness of the animal *is* a unity, though it is not a unity *for itself*. Its passing states may leave images behind them, which are recalled by new sensations and recall each other according to an empirical law of association, and which may awaken appropriate impulses, as when a dog shrinks from the stick that has beaten him; but such a play of sensible ideas or images will not account for knowledge, which implies that the different data of sense are distinguished yet bound together in one consciousness and connected in definite ways as representing permanent objects.

Combination of the unconscious activity of the imagination and the conscious activity of the understanding.

In what has been just said there are a number of ideas, which cannot yet be fully explained, but it may suffice to show that, as we pass from the *Aesthetic* to the *Analytic*, we come in sight of two very important elements in Kant's view of perception, of which in the *Aesthetic* there was scarcely any indication: *first*, that in perception both pure and empirical, there is involved an associative combination of the elementary data of sense, which is to be traced to the imagination and through it to the understanding; and secondly, that, even after this action of our mental spontaneity in perception has been recognised, we have not yet fully accounted for the peculiarities of our perception. For our perceptions are what they are, because of a relation into which they are brought in our consciousness of them, viz., the relation to the pure conceptions of our understanding. Apart from this relation they cannot give rise to a consciousness of objects but merely to a series of images, which pass before our mind's eye without being recognised as the images of any objects, still less of an ordered world of objects. The unconscious synthesis

of imagination, by which the appearances of sense are presented to us in an unbroken continuity of images in harmony with the forms of time and space, if it explains how perceptions are made out of sensations, does not yet explain how that continuity should be broken by the recognition of separate elements, which are distinguished from each other and how at the same time these elements should become connected together in certain definite ways. Yet all this, in Kant's view, is involved in the reference of these perceptions to objects. Hence the naïve view of the ordinary consciousness, according to which individual objects as such are given to us in sense in all their complete determination as individuals, is once for all set aside. For even the images of perception are not given to us apart from the activity of the mind to which they are given; and, if they were, they could not be recognised as images of objects, without a further mental activity. If we reduce sense to what really belongs to it, all that is left would be a series of transitory sensations without relation to each other. Thus even for an associative principle that could create a mere perceptive consciousness, we require the unconscious working of a principle of unity kindred in nature to that which is manifested in the self-conscious activity of the understanding; and in order that we may be able to make any *use* of the perception, so as to know an object by it, we require that conscious activity itself.

In the *Analytic* and *Dialectic* knowledge is conceived as a process of synthesis which never can be completed.

As we enter upon the study of the *Analytic,* therefore, we have to strip perception of its borrowed attributes, and to reduce it to an element in knowledge; and we have to refer to the activity of thought much that we have hitherto regarded simply as given in sense. We have to make a fresh analysis of a result which hitherto has been represented as if it were given once for all in its completed form. We have to see *in the making* what in the *Aesthetic* we took for granted *as made.* Reducing the data of sense to a mere manifold, in which no principle of unity is working, we have to ask what more is wanted for a connected inner and outer experience, *i.e.,* for the consciousness of a world of objects in space and time, all standing in relation to one self, which at the same time

is conscious of itself as one object among others. In other words, we have to ask how a sentient subject, who is also intelligent, must determine his feelings by thought, ere he can represent himself as one individual in a world of individuals, all of which are included in one space and one time, and have their coexistent and successive phases definitely determined in relation to each other. In the *Aesthetic* all this was supposed to be given in sense. Perception was there regarded as setting us face to face with the individual in his complete, not to say infinite, determination, which no conception could ever exhaust. *Now,* we have to recognise that an individual object can be determined as such only by a synthetic activity of the understanding in which the manifold of sense is brought to unity, and that the infinite determination of the individual merely means that this activity manifests itself in a continuous process, of which we know that it can never be completed. We have to realise, in fact, that experience is a process of continuous synthesis which is stimulated and guided by an idea that can never be completely realised. The beginning of this process is made, whenever different elements given in sense are combined in the unity of a conception and so referred to an object.[1] The end of it would be the determination of that object in relation to an absolute whole beyond which no data can be given for synthesis. In other words, the object in being determined as such becomes the *punctum stans* of a progressive determination, which can find no limit unless we are able to connect it at the other end with the absolute boundary of the universe. This absolute goal we assume as a reality which exists objectively, independent of the process of our knowledge, *i.e.,* we assume that the individual object is determined in relation to the absolute whole of things; and that we, in progressively

[1] Really, as we have seen and shall see more fully in the sequel, this first process is more complex than is indicated in the words used above: for the synthesis of the understanding implies first the distinction of the elements of perception (which have been combined in the blind synthesis of imagination), and then the recognition of their connexion as corresponding to a pure conception. We have, therefore, to think of an unconscious associative process of imagination as continually anticipating and forming the basis for the conscious process of knowledge.

determining it, are merely tracing out lines of connexion and determination, which exist independently of the knowing subject and of all the activity of perception and thought whereby he acquires a consciousness of it. Yet, on the other hand, Kant points out that this idea by which we are guided comes into contradiction with the very nature or essential conception of the synthetic process by which we seek to realise it. For, in the first place, in so far as the process is a process of synthesis of a given manifold, the mind that performs it can never find in itself a ground for the conviction that the synthesis is completed: and, in the second place, if we look to the forms under which the manifold is given, it is manifest that they preclude the very idea of completion: for as we cannot find a limit to extension in space or to duration in time, so we cannot exhaust the possible determinations of a world in space and time. It is a world which by the nature of the case is without limit or boundary, which it would be a contradiction to suppose limited or bounded. It appears, therefore, that we have to regard experience or knowledge as a process towards a goal which yet by the nature of the case it can never reach; so that the very idea of an objectively completed world, which in the process of knowledge we seek to bring into consciousness, comes directly into collision with the fact that we are conscious of that world as being in space and time, and as therefore incapable of being ever completely determined. Experience is thus an endless process, which yet necessarily is assumed to have a fixed and definite end. Or it is an endless effort to get beyond the subject to an object which is supposed to be determined in itself; while yet the very nature of the process shows that we cannot by means of it reach that which is determined in itself, *i.e.*, that we cannot get beyond the subjective.

New conception of the relation of the phenomenon to the thing in itself.

These considerations necessarily give rise to a new conception of the opposition between the phenomenon and the thing in itself, a conception different from, or at least going beyond, that in which the *Aesthetic* rested. *There* the thing in itself was that object which was conceived as producing an affection in the sensibility. This affection, with the aid of the forms of sensibility, was further

represented as directly giving rise to the perception of an object, which, of course, could not be known to agree in any characteristic with the object that affected the sensibility. It might, however, be asked,—and from mere perception taken by itself, and viewed as Kant views it in the *Aesthetic,* no answer to the question could be derived,—whence comes this consciousness of an object different from the phenomenal object; or, what is the same thing, whence comes this consciousness of sense as having an object, so to speak, thrust upon it from without? For a passivity can be known only in contrast with an activity, and in the *Aesthetic* no activity is mentioned. The answer comes in the *Analytic,* where we learn that the perception of an object does involve an activity of synthesis, which, however, has reference to, or is exerted upon, data given independently of it. Hence, as the mind becomes conscious of its own activity, it sets up a goal for itself in conformity with that activity, and by the determination of the matter of sense under its forms, it seeks to reach that goal. But the effect of this effort is to bring into prominence a collision or opposition between the end and the means which the mind has to use in realizing it; between the combining activity of thought and the material with which that activity has to work. The goal set by the mind before itself, therefore, appears as a noumenon or thing in itself, which the mind cannot grasp, because it is not purely active but has to receive its matter as given. And the affection of the subjectivity, which is thus the presupposition of its activity, must of course, be referred to the noumenon or thing in itself, which is the only thing that the mind is conscious of beyond its own process in experience, since it is the goal which the mind sets up for that process. In this way we can see how the *Analytic* at once justifies the presupposition of a thing in itself made in the *Aesthetic* and carries us beyond it. For it gives to the thing in itself the character of a noumenon or ideal set up by knowledge for itself, and just for that reason represents it as the ultimate reality to which we must refer the affections, *i.e.*, the data on which the mind's activity is exerted.

Summary view of the problems of the *Analytic* and the *Dialectic*.

The truth of this view we do not yet seek to discuss.

Indeed, the full discussion of it is not possible, until we have considered how, in Kant's view, the character of the activity of the pure intelligence limits it to synthesis of a given matter, and at the same time makes it impossible for it to realise its ideal in a matter given under the forms of time and space. At the point we have reached it is sufficient to call attention to the way in which the problems of the *Analytic* and the *Dialectic* open before us. Perhaps one of the greatest hindrances which Kant has put in our way in comprehending the *Critique,* is the formalistic way in which he has separated these two parts of it, setting understanding and reason before us as two separate 'faculties,' without casting sufficient light upon the identity of the intelligence in these two different aspects of it. The preliminary view we have now taken may be sufficient to indicate how Kant's reconsideration of the results of the *Aesthetic,* or rather of the *Dissertation,* led him to recognise the necessity of dealing with the double problem as to the process and the ideal of knowledge, and to give a new interpretation of the contrasts between perception and conception, and between the phenomenon and thing in itself. In the *Analytic* and *Dialectic* respectively, our eyes are directed first to one and then to the other of the terms in these contrasts: in the *Analytic* to the process of experience and the phenomenal object, in the *Dialectic* to the ideal of experience and the noumenal object. But we cannot really understand either, unless we keep in view that any result reached by looking at one of the two complementary aspects of the system is provisional, and that the bearing of the *Critique* cannot be seen until we are able to combine them in one final view.

With this caution we must now proceed to the exposition and criticism of the *Analytic.*

CHAPTER III

THE TWO LOGICS, AND THE DISCOVERY OR METAPHYSICAL DEDUCTION OF THE CATEGORIES

The *Aesthetic* is the first step in critical reflexion.

OUR analysis of the *Aesthetic* has shown that it is the first step in that transformation of the ordinary consciousness by going back upon its presuppositions, which is the essential work of philosophical criticism. Taking the common view of perception as the immediate consciousness of an individual object through sense, the *Aesthetic* showed that such an object always presents itself as a special determination of the presupposed individual totality of space or time, and that only on this theory is it possible to explain the way in which mathematical science anticipates sensible experience. The constructive synthesis of mathematics would not be possible, if space and time were not the *a priori* forms of perception.

The *Analytic* and the *Dialectic* involve a new reflexion upon the presuppositions of the *Aesthetic*.

But when we pass on to the *Analytic*, we find that this first stage of critical reflexion itself starts from presuppositions which are not strictly accurate. For no totality, no individual whole can exist for us except through a synthetic activity, which brings together the data of sense in relation to the unity of the conscious subject. If we abstract from such a combining activity, what remains is merely a 'manifold,' *i.e.*, a 'many,' which is not yet a 'many-in-one.' Further, even if we attribute to sense, as immediately determined by the unity of the conscious subject, a synthesis of the manifold which is sufficient to turn sensation into perception, we are obliged to regard this synthesis as implicit and unconscious, *i.e.*, as a synthesis of elements which are not definitely distinguished and related; and the unity of such perception

still needs the understanding to make it explicit. We are, therefore, obliged to recognise that "perception without conception is blind," and that it requires the activity of the understanding "to bring it to conceptions," even if it be also true that "conception without perception is empty," *i.e.*, that it reduces itself to the barren unity of analytic thought, which has no relation to any difference or 'manifold.' It is, therefore, the business of the *Analytic* to show that the unity of *apperception* is necessary to experience as well as the unity of *perception*; and to explain how, in relation to the manifold, the former unity gives rise to the principles of *a priori* synthesis which are required for the determination of the objects of experience as such. Lastly, it is the business of the *Dialectic* to show how the same unity is also the source of a still higher kind of principles, by which the determination of objects in experience is connected with that idea of absolute totality which in the *Aesthetic* had been "represented as given" in the case of time and space.

The meta-physical and transcendental deductions of the categories and ideas.

Again, both in the *Analytic* and in the *Dialectic* we find that Kant divides each of his problems into two subordinate inquiries. In the first place, he endeavours to *analyse* the understanding and the reason, and to discover the implements, *i.e.*, the forms of synthesis, with which they are armed for their work: viz., in the one case, the pure conceptions or categories which the understanding uses to determine the objects of experience as such, and in the other case, the Ideas by means of which the reason seeks to carry that synthesis on to the unconditioned and to connect empirical knowledge with the consciousness of things in themselves. Then, in the *second* place, he seeks to *justify* both conceptions and ideas so far as they are capable of justification; in other words, to show in the case of the pure conceptions that they are just those categories which are required for, and presupposed in, our actual knowledge or experience; and in the case of the Ideas, that, though they are not capable of being used in the determination of things in themselves, yet they have a regulative use in relation to empirical science, as setting before it the ideal aim after which it must strive and by which its progress is guided. In other

words, Kant seeks to supply both a *metaphysical* and a *transcendental* deduction of his categories and ideas, as well as of the *a priori* principles of understanding and reason which are based on them. In this chapter we have to consider how Kant performed the former of these tasks, in relation to the categories of the understanding, though it may also be necessary to say a word about the ideas of reason in order to bring out the unity of Kant's method in both cases.

Kant's use of formal Logic in metaphysical deduction.

In a previous chapter[1] we have referred to Kant's account of the way in which he was led to connect his lists of categories and of ideas with that analysis of the process of thought which is supplied by formal Logic. Universalising the problem suggested by Hume in relation to the objective value of the principle of causality, Kant asked how we are authorised to say that an objective value attaches to *any* of the *a priori* conceptions; and this again led him to ask what *a priori* conceptions there are. In seeking to answer this question, Kant found that the list of Aristotle's categories would not serve his purpose: for it seemed to be constructed on no definite principle, but merely by taking up any *a priori* conception which happened to present itself in a general review of experience. Besides, it contained several ideas which Kant had already discovered to be determinations of the forms of sense. In this difficulty it suggested itself to Kant that formal Logic had already analysed the process by which the mind manipulates the content of the ideas which it already possesses, whatever be the source, *a priori* or *a posteriori*, from which it has derived them; and, though this is a different thing from the process by which the mind goes beyond itself to apprehend objects or to add new elements to those already combined in its ideas of objects, yet both processes belong to the same mind, and may be expected to have an intimate relation to each other. There will no doubt be an essential difference in the two processes, if, and in so far as, in the latter there is something which depends, not on the activity of the subjective intelligence, but on the object or on the way in which the subject is acted on by it (*i.e.*, upon the affections of sense, and the

[1] See above, p. 191 *seq.*

nature of the sense affected). But, in so far as in both cases we have manifestations of the activity of the intelligence itself, they will be closely akin to each other; and what is ascertained of the one process may be expected to afford a clue to discover what is true of the other. In other words, the *real* process of intelligence, so far as it is *a priori*, may be expected to show characteristics identical with, or closely analogous to, those of its *formal* process. Now, the characteristics of the latter process had been, as Kant held, sufficiently explained by formal Logic: a science which was all but completed at a stroke by Aristotle, and inherited from him without substantial change by his successors. Hence this *formal* Logic was for him a safe and secure point of departure for the discovery of the *transcendental* Logic; and he held that every one of the elements of the former might be treated as a guiding thread in the search for some corresponding element in the latter.

The formal processes of judgment and syllogism by which conceptions are analysed.

The process of thought as analysed by formal Logic is divided into the three subordinate processes of conception, judgment and reasoning, and each of these has its special characteristics. A conception is defined in contrast with a perception as a general idea, which, as general, is not in immediate relation to an object, but constitutes a unity under which the perceptions of objects may be brought, either directly or indirectly, through other conceptions less general than itself (the extension and comprehension of a conception being in inverse ratio to each other). Judgment, again, is the process in which this relation between a perception and a conception, or between two conceptions, is established; hence we may say that the one use of conceptions is to make judgment possible, *i.e.*, to subsume under them perceptions or less general conceptions. Finally, the reasoning or syllogistic process is a process in which the mediation between the terms of the judgment is carried to the furthest point, reaching its ultimate goal when no further middle term can be found between the subject and the predicate.

Their difference from the synthetic processes of judgment and syllogism which are based on *a priori* conceptions and ideas.

Now in all this, the intelligence proceeds analytically: in other words, it starts with an idea, *i.e.*, a conception or perception of an object, which it presupposes as given

without asking how it is given; and it is by abstraction from that idea that the intelligence gets the conception which in the judgment it attaches to it as a predicate, and also the conception which in the syllogism it uses as a middle term to combine the subject and predicate of the conclusion. When, however, we begin to consider how this will apply to a kind of judgment and syllogism in which the intelligence goes beyond itself to determine an object, or goes beyond its conception of an object to add new elements thereto, we find that something more is necessary. Here we have to do not with the analysis of a complex conception of an object which is already formed, but with the first formation of the conception of the object, or with the addition of new elements to it. At the point we have now reached, the question how this is possible can no longer be answered in the simple way which was considered sufficient in the *Aesthetic, i.e.*, by saying that it is in perception, pure or empirical, that the object is presented to the mind, and that it is from perception also that all new elements must be drawn which are to be added to the conception of it. For an object as such is now seen to be a 'many-in-one,' the consciousness of which cannot be accounted for by the impressions of sense taken singly, but only by their being combined on some principle of union. And in like manner, the addition of new elements to the conception of an object implies, not only that these elements are *given* in sense, but also that the intelligence is able to bind them up with the others already combined; and for this also there is required some principle of union. In this case, the activity of thought cannot extract from the objects with which it deals the more general conceptions under which it subsumes them; but it must bring these conceptions with it to the 'given data' in order to combine them in the consciousness of an object, or to add new elements to the conception of that object. Further, as in analysis we cannot stop till we find the simplest and most general idea under which a class of objects can be brought, so in synthesis we cannot stop till we find some first principle or all-embracing idea beyond which our intelligence can seek for nothing further. Here, therefore, for the analytic processes of

judgment and reasoning, in which the mind derives all the data it needs from the conceptions with which it deals, we must substitute synthetic processes, in which the intelligence must itself supply all the principles of unity by means of which it determines its objects. And, as in the former case, we have in judgment and reasoning analysis upon analysis up to the point where no further analysis is possible, so here we shall have synthesis upon synthesis, up to a first principle in which reason is finally satisfied. But the synthetic judgment is impossible without *a priori* conceptions to establish unity in the given manifold of perception, and the synthetic syllogism is impossible without *a priori* ideas to which we may carry back the entire synthetic process of judgment, and by means of which we may give it perfect completeness and unity. Or, to put the same thing in another aspect, we require an *a priori* principle of understanding to combine the elements of the manifold of perception in relation to the unity of the conscious subject; while we require an *a priori* principle of reason to enable us finally to complete the synthesis of objects, and so to overcome the division between object and subject, and reach the determination of the thing in itself. In the former case, therefore, the understanding, and in the latter case the reason, has to supply the *a priori* principles which are required for knowledge, and which are not to be got by analysis from the data to which they are to be applied.

Difference between the conceptions of the understanding and the ideas of reason.

According to this view, then, there are real functions of understanding and reason in relation to knowledge, which correspond exactly with their formal functions in relation to thought; and both understanding and reason bring with them *a priori* principles for the determination of objects. But there is a very important difference. For the *a priori* principles of understanding are necessary in order that anything may be determined as an object at all; and they *must* find application, if any data of sense are given in such a way that they can be brought in relation to consciousness: whereas the *a priori* principles of reason are not necessary for the determination of objects in relation to the conscious subject, but only for the absolute completion of such determination. The latter,

therefore, can find application, only if the manifold for synthesis can be exhausted, and the synthetic process of the understanding brought to a conclusion. They are in fact principles, the use of which can only be to bring the synthesis of the understanding to a final unity. But, if it be the case that the forms under which the manifold is given for synthesis, *i.e.*, time and space, are such as to preclude the completion of the synthesis of the understanding, then the *a priori* principles of reason can have no objective application. They can only represent an ideal of reason which can never become actual. On the other hand, the pure principles of the understanding, *i.e.*, the principles which are involved in the activity of judgment, must needs, as we have said, find application, if there is to be such a thing as knowledge; for only through the application of these principles can the manifold become united in the conception of an object. We may therefore see, even from this preliminary view of the matter, that, on Kant's principles, the *a priori* synthesis of understanding must be possible, while the *a priori* synthesis of reason must be impossible; or, what is the same thing, that the *a priori* conceptions of understanding must be objectively valid in so far as the manifold to which they have to be applied is given, while the *a priori* ideas of reason cannot be valid, because the synthesis of understanding to which they have to be applied, cannot be completed.

What is necessary for synthetic judgment? Both imaginative and conceptual synthesis.

Deferring, in the meantime, the consideration of the *a priori* principles of reason, let us look more closely into Kant's "metaphysical deduction," *i.e.*, his discovery of the categories of the understanding;—to which he was led by a consideration of the forms of judgment. The principle upon which he goes is, as we have seen, that the analytic judgment,—in which our understanding subsumes the perceptions or conceptions it already possesses under higher conceptions got by analysis from them,—has a close correspondence with the synthetic judgment, in which the understanding goes beyond itself and what it already knows in order to determine objects, (or to determine them further than they are already determined for us,) by bringing the manifold of perceptions under conceptions derived from itself. There is, however, an

important difference in the two cases compared: for, in the former case, a subject is brought under predicates that already form part of the idea of that subject, while in the latter case, what is given in sense is only a manifold, *i.e.*, a number of elements unconnected with each other; and it would seem as if these could become connected together, so as to form a proper logical subject only *after* the predicate had been applied to them. In other words, it would seem as if in this case the predicate were needed to give to the subject that unity in virtue of which alone it can be an object of thought, or a subject to which any predicate can be attributed. For the manifold must be combined *with* thought, if it is to be combined into an object *for* thought. Kant tries to get over this difficulty by distinguishing perception and conception as two steps in knowledge, in the first of which we have synthesis, while in the second we have the consciousness of the principle of the synthesis. Of the former he says that it is the "work of imagination, a blind but necessary function of the soul without which we should have no knowledge, though we are seldom even conscious of it." But though this synthesis is necessary for knowledge, it is not sufficient for it. In addition to it there is required "for knowledge, in the proper sense of the word," an activity of the understanding, the business of which is to "bring the imaginative synthesis to conceptions," *i.e.*, to detect the principles of unity implied in such synthesis, or to find some principle under which it may be brought.[1] Now, when we go back to the beginning, the principles of unity, by which the manifold is combined and is determined as a definite object for thought, must be found in the unity which thought has with itself, and which is expressed in the analytic judgment. Kant holds, therefore, that the synthetic unity of an object, as a definite object of perception which can be made the subject of analysis, is due to the same principles which govern such analysis. It is only that the use to which they are put is somewhat different. Thus the logical principles involved in judgment become a guide to us in "bringing the

[1] In the next chapter we shall consider more particularly which of these ways of expression is the more exact statement of the truth.

primitive synthesis of imagination to conceptions." In a pregnant passage, which almost breaks down with the weight of meaning which he makes it carry, Kant declares, that "the same function, which gives unity to the different ideas in a judgment, gives unity also to the bare synthesis of different ideas in a perception: and this unity, when we express it in its generality, is the conception of the understanding. Hence, the same understanding, by the same acts which enabled it, through the analytic unity of thought with itself, to give to its conceptions the logical form of the judgment, is enabled also, by means of the synthetic unity of thought with itself in apprehending the manifold of perception, to introduce into its ideas a transcendental content. These acts, therefore, in the latter application, are entitled the *a priori* conceptions of the understanding, and they refer *a priori* to objects, a kind of reference which is altogether beyond the scope of general Logic." [1]

Relation of the syntheses of imagination and understanding in the judgment.

The passage, from which the foregoing quotations are taken, contains some ideas which must wait for explanation till we reach the Transcendental Deduction of the Categories. For the present purpose, it may be sufficient to exhibit its general drift. Sense, whether pure or empirical, yields only a manifold, which requires to be brought to a unity ere by its means we can have a perception of any object. Hence, a synthetic judgment by which the manifold of perception is put together in the unity of an object must precede all analytic judgments. It might, indeed, seem that in the primitive synthesis judgment was not required; for synthesis, as a mere putting together of the elements of perception, can be explained by the imagination as a "blind" and unconscious manifestation of the unity of thought. This at least might seem sufficient to explain why we have distinct images of perception, in which the manifold of sense is brought together into one idea which may be made the subject of a judgment. But it is not so; for the consciousness of such a unity, as an object of thought which may be made a subject of predication, is attained only when the judgment is actually made; and the perception is thus at once distinguished

[1] A. 79; B. 105.

from, and referred to, a conception which expresses the principle of its unity (or under which its unity is brought). Such a judgment may be called analytic, since what it expresses as the predicate is already involved in the subject. But so to call it, would be to forget that it is as distinguished from and related to the predicate that the subject gets its determination as subject. In other words, the judgment appears to presuppose a movement of thought which is only accomplished in it: and we may say from one point of view, that the primitive judgment determines the perceived object synthetically in relation to a conception which is not contained in the idea of it as perceived; while from another point of view we may say that the object as perceived is already determined by the conception and that the primitive judgment only analyses it. In the passage which we are considering, Kant uses language which is not quite distinct, and we shall have to consider in the next chapter whether the difficulty suggested is ever fairly met by him. For the present it is sufficient to point out that the analytical process of judgment, in which a more general conception is abstracted from a less general and then used as a predicate to determine it, is conceived by Kant as analogous to, and in principle identical with, the synthetical process, by which a conception derived from the understanding is used to determine a perception derived from sense, and so to give objective value to the imaginative synthesis of the manifold. In the former case, we have thought abiding with itself and its possessions, and, so to speak, reasserting its own unity with itself in the apprehension of all their differences: in the latter case, we have thought going out of itself to determine by its own unity that which has not previously been brought within its reach. But the processes are, as Kant thinks, fundamentally identical. Hence, the account given by formal Logic of the pure unity of thought with itself, which is exhibited in the analytic judgment, may be used as a guide to discover the categories by which perceptions are referred to objects, or by which the synthesis of the manifold of perception made by imagination is so "brought to conceptions" that it can be recognised as objective.

Kant's view of the relation of the analytic to the synthetic judgment.

Unity and plurality of the conceptions of the understanding.

There are, however, some ambiguities in Kant's statement which may require a word of explanation. Thus it is confusing that Kant at first speaks of the pure conception of the understanding in the singular, while at the end of the passage he uses the plural. This, however, we may account for by the fact that what he is dealing with is the method in which the pure unity of thought differentiates itself in relation to the manifold of perception. The categories are "species of the unity of apperception," which disappear in that unity when we regard them only in relation to it, while they appear as a number of separate conceptions when we view them in relation to the manifold. Hence, in the former reference, it would be natural to speak of the conception, rather than of the conceptions, of the understanding; only we must remember that, in Kant's view, the pure unity reveals itself in various functions of unity even in the pure analytic judgment, which for that reason is used as a guide to the discovery of the categories.

Difficulty as to the use Kant makes of the analytic judgment.

Another and more important difficulty is to explain how those pure conceptions, which primarily are only aspects of the unity of thought with itself independent of any matter, can possibly yield principles of unity to determine the synthesis of the manifold of sense. This difficulty cannot in the meantime be fully considered. I have, however, already remarked that it is one of the peculiarities of the synthetic act of judgment, which Kant is describing, that it is only in reference to the predicates, under which the understanding brings the manifold of sense, that that manifold can itself be determined as a subject. And now I may add that, according to Kant's doctrine, it is only in reference to the manifold that the pure function of unity gets its character as a predicate, under which the manifold can be brought. There is thus a reciprocal presupposition which it would be impossible to understand, if we were here dealing with a process in which one step was completed before the other began, and not with the analysis of an organic unity in which each element implies all the rest, and can be separated from them only by abstraction. Kant, indeed, holds that the pure process of thought can be separated, and that it is separated by

formal Logic, from any matter. But he is obliged to recognise immediately that in this separation it is not what it is in the unity. And it is not difficult to show that when we carry out such a separation to its necessary result, the analytic unity itself disappears in identity. Kant himself practically confesses as much when he says that analysis presupposes synthesis, and the analytic unity the synthetic unity. The main difficulty of this part of Kant's work, in fact, is just this, that he thrusts in the pure analytic judgment as a middle term between the unity of apperception and the categories, and does not discern that his own reasoning is entirely fatal to its existence. This, however, will be more clearly seen, if we follow Kant closely in the process whereby he makes the former a guiding thread to the latter.

How Kant gets the transcendental, out of the logical, system.

Kant, then, attempts to discover the pure *a priori* conceptions by reference to the fourfold classification of judgments according to Quantity, Quality, Relation, and Modality, with their subordinate modifications. Taking this classification as an ascertained result of the Logic which analyses the formal process of thought, he asks what will correspond to it in the real process of knowledge, *i.e.*, what is the "Transcendental System" that corresponds to this "Logical System"? Thus, if judgment in analysing a conception must determine the Quantity of the subject in relation to the predicate, there must be some corresponding "function of unity" by which the manifold of sense is determined when it is brought together in the perception of an object. And what that function must be, we may at once see if we consider that as, according to the view of the formal logicians, the analysis of ideas necessarily involves a reference to Quantity, the idea of Quantity itself must be a principle on which the manifold elements of the idea were put together. We get, therefore, corresponding to the singular, particular, and universal judgments, the categories or forms of Unity, Plurality, and Totality. In like manner, if analysis necessarily has respect to Quality, *i.e.*, to the exclusion of the predicate from, or inclusion of it in the subject, or finally to the inclusion of the subject in a sphere defined only by the negation of the predicate, synthesis must be

negative, or positive, or limitative, determination, which gives rise to the three categories of Reality, Negation, and Limitation. Again, if analysis involves that the ideas distinguished are at the same time *related*,—either simply as a predicate to a subject in the categorical judgment, or as reason and consequent in the hypothetical judgment, or finally as genus to the species, which it includes but which reciprocally exclude each other, in the disjunctive judgment,—it follows, that in the synthesis by which the manifold is put together in an objective consciousness there must be three corresponding modes; and these we may by anticipation recognise as the relations of Substance and Accident, of Cause and Effect, and of Reciprocal Determination. Lastly, if the analytic judgment implies that the predicate shall be conceived as either assertorially, problematically, or apodictically connected with the subject, it follows that in the synthesis whereby the consciousness of an object is constituted, there is a principle of determination of the manifold objects as possibly, actually, or necessarily, united with the self-consciousness of the subject for which they are. In short, as all analytical judgments, by which some element of an idea is separated from, and referred as a predicate to, a subject, involve a determination of the subject and predicate in relation to each other in Quantity, Quality, Relation, and Modality, according to one or other of three alternative forms of the categories, it would seem that the synthesis by which the conception of an object is formed out of the manifold, must involve a determining process according to corresponding principles. For, as the separation of the elements of an idea which the mind possesses only gives us a clear consciousness of these elements as already determined in certain relations to each other, it is obvious that in the process whereby the mind first went beyond itself to form the idea of an object by uniting the elements of the manifold together, there was involved the determination of the manifold in all these various ways. Thus the synthesis, by which the manifold must be brought together in order to be an object for the conscious subject, involves a determination of the manifold by all these species of categories according to one of the three forms of each species.

Does it correspond to Kant's own idea of a metaphysical deduction?

The first criticism to be made upon Kant's attempt thus to elicit the principles of determinant or synthetic judgment from those of analytic or formal judgment, is that it does not quite correspond to his own idea of a "metaphysical deduction" of the categories. Objecting to Aristotle's list of categories as empirically "picked up," he demands that the categories should be evolved from "an idea of the whole of *a priori* knowledge," which shall exhaustively determine all the parts and their relations to each other. "Transcendental philosophy," he says, "has the advantage that it can, but also the obligation that it must, seek out its conceptions according to a principle; for its conceptions must spring pure and unmingled from the understanding as an absolute unity, and, therefore, they must be connected with each other according to one idea. But such a connexion necessarily puts into our heads a rule, according to which the place of each pure conception of the understanding, and the completeness of the whole list, may be determined *a priori.*"[1] Now, how does Kant realise this idea? He points out that the categories are forms of the *a priori* synthesis by which objects are determined as such, and, as we shall see, he carries them back to "pure apperception" as the unity out of which they spring. But instead of showing directly how they spring from that unity, he has taken the roundabout method of basing his list of the pure conceptions that rule the synthetic judgment upon the aspects or modes of analytic judgment, and he has simply adopted the list of these modes from formal Logic. But, if he had realised his own ideal, he would have been obliged, first of all, to show how it follows from the idea of the analytic judgment that the list should contain just these and no other forms. And, even after he had used the 'logical system' so derived as a clue for the discovery of the categories, he would not have considered himself free from the obligation of showing from the nature of the synthetic judgment itself that they form a complete system of *a priori* conceptions.

Pure form, taken abstractly, makes the judgment disappear in the simple identity of subject and predicate.

Now, as to the first of these steps, the assumption that the analytic judgment has all the forms mentioned and

[1] A. 67; B. 92.

no others, or in other words, that these determinations belong to the form as distinguished from the matter of judgment, and therefore fall within the scope of a Logic that deals with mere analysis, Kant's trust in the finished work of the logician has obviously misled him. For, if we strictly apply the idea of analysis, the determinations of Quantity, Quality, Relation, and Modality must immediately disappear, like all other determinations, in the bare identity of subject and predicate; and with that the judgment itself will lose all its meaning. To see this we need only observe how the idea of limiting Logic to the *form* of thought has worked itself out in the history of the science. The inevitable results of the search for bare form without matter has been to eliminate one element after another, till the judgment has disappeared in the expression of bare identity. First, Modality was excluded, because analytic judgments are always necessary, and with any other connexion of conceptions than that which is indicated by analysis formal Logic has nothing to do. In the next place, the various relations expressed in the categorical, hypothetical, and disjunctive judgments were reduced to the single relation of containing and contained Quantity. Then Hamilton proposed that the predicate should be quantified on the ground that what is "implicit in thought should be made explicit in Logic"; in other words, in order to make manifest the identity, he would remove the quantity from form into matter. The predicate being quantified and the judgment thus reduced to an equation, the next step was that the quantity of particular judgments should be made definite by the introduction of number. Jevons went a step further, and argued that if the predicate is to be quantified on the ground that what is implicit in thought should be made explicit in Logic, then it should be also qualified by the subject, because in the judgment, it is implicitly limited thereby: in other words, to make manifest the identity, Jevons removed the quality from form into matter. Thus the formula of judgment became, not A = B, or A = some B, but A = AB: not, "All men are mortal," or, "All men are some mortals," but, "All men are mortal men." Thus there remains but a single step to be taken to bring formal Logic

to the euthanasia of pure form: viz., that the subject also should be qualified by the predicate. The judgment would then take the form, AB = AB, or, "Men mortal are mortal men," and would pass into the tautological expression of an identity.

Judgment is never analytic

The truth, then, is that the elimination of matter from the judgment is possible only when the form is reduced to a simple identity. A tautological judgment is the only pure analytic judgment, and a tautological judgment is, strictly speaking, no judgment at all. It is a judgment that is never made except as a logical exercise. Identity has no significance except in relation to differences. Even where there is an appearance of a simple identical judgment, there is always an implied *nuance* of difference, left to be indicated by emphasis, between the subject and the predicate. "A man's a man for a' that" is not a tautology. In the purest analytic judgments which we can make there is always a synthesis of difference. Kant, indeed, says that the judgment, "All bodies are extended" is analytic, because without this quality we cannot have the conception of body at all. But no one would make that judgment, unless there were other qualities or elements in the conception of body with which extension was or might be connected, or if it meant merely "The extended is the extended." The separation of one quality from the complex of qualities in an object is always made in view of establishing a new relation between the elements of that complex, or between it and other objects.[1]

An analytic syllogism is no syllogism.

Another consequence of what has been just said may be mentioned, though it carries us beyond our immediate subject. If a merely analytic judgment is no judgment at all, then a merely analytic syllogism is no reasoning at all. For reasoning means the mediate combination of two ideas which are not capable of being immediately united. But in pure analysis there are no differences to dissolve, which are not presupposed as already dissolved,

[1] We may express this otherwise by saying that the object of a judgment is to produce an identity, to reach a unity of conception. Judgment is conception in the making. Where the identity is reached, which it would be the business of the analytic judgment to express, there is no longer any reason for judging at all. (Cf. above, p. 247 *seq.*)

or if there are, nothing is done to dissolve them. A complex idea is supposed to be present to the mind, but the whole analytic process does nothing to bring its elements into closer relation either to each other or to the mind. They are assumed to be already united with each other, or, as far as they are not already brought to unity, their reference to each other as subject and predicate does nothing to help us to reunite them in a better way: nor will any extension of the analytic process such as gives rise to a "tree of Porphyry" and to a syllogistic process of subsumption, make matters better. In like manner, the idea which is to be subjected to the logical process is assumed to be already united with thought, *i.e.*, in Kant's language, with the "I think" of Consciousness; or, if its union is still imperfect, the most thorough analysis cannot disclose any link which will more perfectly combine the content with the form of thought, the object with the mind which thinks it. On this view of it the whole process of syllogistic reasoning proves nothing, or proves only by a glaring *petitio principii*. The mind simply revolves on itself, or does over again its own finished work, and never can by any possibility gain one step in advance. In this case, therefore, we have a reasoning that contradicts the very idea of reasoning, just as in the former case we had a judgment that contradicted the idea of judgment.

Consequences of Kant's taking pure thought as analytic.

It appears, then, that formal Logic does not give us any account of a pure process of thought which might furnish a clue for the discovery of the forms necessary to the *a priori* determination of objects. If its principle be carried out, it empties the processes with which it deals of all the content which they seem to have, and reduces their form to nothing: indeed, it was only because that principle was not fully developed in the "general Logic" of Kant, that it still seemed to have a "form of thought" to speak about. In other words, it was only in so far as formal Logic still preserved a kind of ghost of that real process which Kant was seeking to discover, that it seemed to supply him with a clue to the discovery. And Kant's advance to the new Logic was simply a disguised refutation of the old, a restoration to Logic of the elements which, guided by a false principle, it had been led to

reject, and a correction of the false views which had arisen out of this rejection. To Kant, indeed, just because he holds to the idea that the pure process of thought is analytic, the modifications which he has to introduce in order to reach the synthetic process, appear to be accommodations of pure thought to the nature of our perceptions. Hence, in opposition to such accommodation,—which, by the nature of the case can only give rise to a knowledge of phenomena,—pure thought is conceived by him as setting up an ideal of knowledge, which, if it could be realised, would be a knowledge of noumena or things in themselves. If, however, we reject the idea of analytic thought, these modifications will take an altogether different aspect. They will cease to be accommodations of thought to a foreign matter, with which somehow it has to deal, and will be seen to be the first steps toward a truer view of the process of thought than that which was expressed in formal Logic; and the ideal of knowledge will cease to be confused with that abstract identity in which all knowledge and all thought disappear.

Kant transforms the Logical system in order to adapt it to his purpose.

The first steps in this transformation or modification of the analysis of judgment in formal Logic are already taken by Kant in his account of that analysis. For Kant does not simply borrow his list of forms from the logicians, but modifies their list with reference to the purpose for which he is going to use it, remarking with some naïvety, that certain distinctions are of importance with reference to transcendental Logic, which would not properly fall within the scope of formal Logic. The "logical system" had thus to be somewhat modified ere it could afford a clue to the "transcendental system"; in other words, the clue had to be carried to the point to which it was supposed to lead. Thus, in order to reach a triple division of the sub-classes of the categories, Kant adds, in quality, the infinite judgment to the positive and the negative judgments, and, in quantity, the singular judgment to the universal and particular judgments. Formal Logic, as he points out, does not need to distinguish the singular from the universal judgment, because in both the subject in the whole of its extension is subsumed under the predicate. Nor does it regard the infinite judgment as distinct

from the affirmative: for it has to do only with the affirmative or negative character of the judgment, and not with the character of the predicates asserted or denied. But transcendental Logic has to take account of these distinctions, for it has to estimate the objective value of the judgments in question. In truth, the schema of triplicity is out of place in an analytical division of judgments;—and where should division be analytical if not in the very logic of analysis?—for, as Kant himself elsewhere tells us, analytical division is always twofold, and only synthetical division threefold. "It has been made a difficulty that my divisions in pure philosophy are almost always threefold. But this lies in the nature of the case. For, if an *a priori* division is to be made, it must be either analytical, according to the principle of contradiction, or synthetical: and if, in the latter case, it is to be based on *a priori* conceptions (and not as in mathematics on perceptions), then, according to that which is required for synthetic unity in general, the division must be a trichotomy: for it must be a division which includes, first, a condition, then a conditioned, and thirdly the conception which arises from the union of these two."[1] But if this be true, it follows that for formal Logic there never can be any third category, and it can, therefore, give us no real help in the discovery of a list, the essential feature of which is triplicity. Or, to put the same idea in another form, it is useless in a thought which proceeds by mere identity, to seek for the same elements which are to be discovered in a thought which proceeds by differentiation and integration. The third category, expressing, as Kant himself says, the combination of the other two, involves a function of thought for which in mere formal Logic there is no room.

The categories in each class are not alternatives;

This may be made clearer, if we refer anticipatively to the use which Kant makes of his list of categories. The

[1] *Kr. der Urtheilskraft*, Introduction, § 9. We might ask also, how it is possible consistently with Kant's principles that thought should find in itself the *tertium quid*, which is necessary to combine the duality of its elements in a third category, which as Kant tells us, unites the two others and is something more than their mere external combination. (B. 110.) This subject will be considered in the chapter on the schematism of the categories.

mode of their discovery would suggest the idea that, while every judgment is necessarily determined in quantity, quality, relation, and modality, yet that it can only be determined according to one out of three alternatives under each head. And this, indeed, is the usual way in which formal Logic presents the matter to us, though it offers the choice of two, rather than of three, alternatives. Thus every judgment is either affirmative or negative, and the affirmative and negative judgments are regarded as two distinct and independent acts which have no necessary relation to each other. If, however, we insist on this division, and treat it as absolute, *i.e.*, if we hold to the idea that affirmative and negative judgments absolutely exclude each other, then both judgments will lose all their signification; for a mere affirmation which is not determination and therefore not negation, and a pure negation which is not determination and therefore not affirmation, are equally unmeaning. It may, however, be safely said that we never make a negative judgment which, in removing a predicate, does not imply the position of some other predicate within the general sphere of reality to which the judgment refers; nor an affirmative judgment, which does not further determine the subject by excluding from it some predicate lying within the sphere of reality to which it is already regarded as belonging. When we say that, "The soul is not material," we are thinking of the soul as belonging to a genus which is now further divided or determined; and, therefore, in denying that it belongs to one species of the presupposed genus, we are implying that it belongs to one of the other possible species, which are more or less definitely marked off by the exclusion. So, if we say that "This triangle is right-angled," we are by this affirmation excluding other alternatives, which are more or less definitely thought as left open by the general definition of a triangle. There are not, therefore, three alternative kinds of judgments, positive, negative, and limitative (or infinite), but judgment, if we characterise it fully, is always essentially limitative; or, in other words, judgment always implicitly involves what is expressed most fully in the limitative form of judgment, *i.e.*, affirmation through negation.

Thus the three forms do not stand beside each other as forms between which a choice must be made, but really express different "*momenta*" or phases in one process of thought, to which indeed we may separately direct attention, but which we cannot treat as independent processes. The pure affirmative relation of a predicate to a subject would have no meaning, if there were not also a difference which might take the form of a negative judgment; and the truth can be expressed only by showing how through this difference or negation a positive unity still maintains itself. A similar line of argument might be pursued in relation to the quantitative determination of objects as one, many, or one-in-many. The functions of thought by which such determinations are made cannot be separated, as singular, particular, and universal judgments between which we have to choose; but the determination of an individual is always a determination of it as one particular form of a universal, or as itself a universal in which many particulars are reduced to unity. These judgments therefore can only be distinguished from each other as special "*momenta*" in the process of determination, which cannot be separated from each other, though attention may be especially directed to one or other of them.

nor does Kant treat them as such.

Now Kant, as we shall see more fully in the sequel, does not treat these categories, or the judgments founded on them, as alternatives. This is at once obvious in regard to the categories of Quantity and Quality, from each of which he derives one, and only one *a priori* principle, for the determination of experience. Thus under the head of Quality he does not attempt to find any application for the categories of reality or negation, but only for that of limitation, which is the unity of the two. Hence, the only principle which he derives from this class of his categories is that the real necessarily has a certain degree of intensity, and is determined as standing somewhere between zero and absolute fulness. In the same way the only principle which he derives from the categories of Quantity is that every phenomenon must be represented as extensive, *i.e.*, a many-in-one, a number of homogeneous units. There is no separate or alternative determination by Unity, Plurality, and Totality, but every

object is regarded as determined by the last of these (as including the other two). Under Relation, indeed, we have three separate principles, but this does not really invalidate what has been said, for the three principles are not three alternatives between which we have to choose, but three different steps in one process; and, as will be shown hereafter, the principle of causality presupposes the principle of substance and the principle of reciprocity implies both the others. They are, however, in this case separately stated, because each involves a complex movement of thought in itself. Lastly, the categories of Modality are not alternatives, but, according to Kant's own showing, three stages in the progressive determination of an object in relation to the knowing subject; for, as he says, "it is a gradual process by which the understanding incorporates with itself that which is presented to it; first, it problematically judges something to be possible; next, assertorially accepts it as true, and finally determines it as inseparably bound up with itself, *i.e.*, as necessary and apodictically certain."[1]

It appears, then, that we have not here a threefold division of each class of categories, out of which one alternative may be selected at one time, and another at another, for the determination of particular objects: we have only different aspects or '*momenta*' of that determination of the manifold by thought which is involved in the consciousness of objects as such: and the "judgment of experience" is not only a determination in quality, quantity, relation, and modality, but in each of these by all the categories. It is true, however, that Kant by his way of taking up each category and principle by itself renders this at first somewhat obscure, and that he scarcely gives us sufficient indication that he is dealing with different aspects of one synthesis, or '*momenta*' in one process, to counteract that impression.

The distinction of the mathematical and dynamical categories.

It may, however, be said that though Kant may not absolutely separate the subordinate categories in each class from each other, yet he *does* seem to make a decided division between the different classes of categories. Every logical judgment as such, must be determined in quantity,

[1] A. 76; B. 101.

quality, relation, and modality. But, when Kant deals with the corresponding determination of objects, he seems to draw a marked line of division between their determination by quantity and quality, and their determination by relation and modality. "This table," he says, "which contains four classes of conceptions of the understanding, has a primary division into two sections, of which the former is directed to objects of *perception* (pure as well as empirical), while the latter is directed to the *existence* of these objects (in relation to each other and to the understanding). The first class I will call the *mathematical*, the second the *dynamical* categories. The first class have, as we have seen, no correlates such as are found in the second. This distinction must have some ground in the nature of the understanding."[1] The meaning of this distinction will be more fully discussed in connexion with the principles of pure understanding. For the present it is sufficient to point out that in the mathematical categories and principles we find an element supplied which was wanting to the *Aesthetic*, in which Mathematics was shown to imply a pure perception, and was taken as sufficiently explained by such perception. Now, however, we begin to see that the synthesis of Mathematics is possible only by a construction which is guided and determined by the categories of quantity and quality. Thus, understanding as well as sense is at work in the synthesis of pure space and time, and of matter as in space and time, by which perception is anticipated and determined. But such determination of the perception of objects is distinguishable from the determination of objects for perception. For in this latter case, we do not determine how the manifold must be put together in space in our perception of it, or how it must be united with a consciousness which is subject to conditions of time; but we determine how it must exist for us as an object distinct from and related to all other objects, and distinct from and related to the mind that knows it. This kind of determination is obviously different from the other, although it cannot be separated from it; for in the former case we merely lay down certain common conditions for all

[1] B. 110.

determination of objects as apprehended under conditions of space and time, while in the latter we show that *in order* to be known objects for us, they must be regarded as permanent realities, each of which determines, and is determined by, all others, and stands in certain definite relations to the knowing mind. We might, therefore, say that the mathematical categories determine the object in itself, while the categories of relation determine it as existing in one world with all other objects, and the categories of modality determine it as existing in relation to the mind. Yet, it is to be observed that the different kinds of determination are not really separable from each other, except in the sense that a determination by the categories of relation and modality shows a deeper self-consciousness, a deeper consciousness of that which was really present in the first judgments of quantity and quality. In our first apprehension of objects as in space and time, we take them as isolated from each other, as each having quality and quantity, but not yet as having necessary relations with each other; for their mere presence in one space and one time does not yet seem to be, or to involve, such a relation,—rather it seems to be compatible with their complete indifference to each other. In this stage of thought, therefore, we treat things as having certain common qualities because they occupy space and time, but we do not recognise their necessary connexion with other objects. It is a further step of reflexion when it is seen that such a consciousness of objects involves that they have a permanent reality through all their changing appearances, and that their phenomena are not merely coexistent or successive but stand in essential relations to each other. Lastly, it is only at a still more advanced stage of reflexion that the objects so determined are seen to be necessarily related to the consciousness for which they are, and that this relation also is regarded as an essential element in the knowledge of them. These three stages roughly correspond respectively with the ordinary consciousness, with science, and with critical philosophy; but they must not be regarded as really separate from, or as independent of, each other; for in the first "mathematical" determination of perceptions, there is

Three stages of Reflexion.

already involved the reference of them to permanent objects, which, as such, stand in permanent relations to each other in the whole of experience; and in this again is involved their relation as objects to a conscious self. Thus the 'judgment of perception,' if we can properly speak of a judgment of perception, is already implicitly the 'judgment of experience,' and the judgment of experience is already implicitly the judgment of criticism or philosophic reflexion. But if this be the case, then the classes of categories cannot be treated as independent, any more than the special categories under each head. Further, if this view be accepted, we shall have really what Kant desired, viz., a complete system of categories, which shows its completeness by the fact that each category is a "*moment*" in a process which begins in the first reference of an object to itself, goes on through its determination in relation to all other objects, and ends with its determination in relation to thought.

Kant's gradual advance towards an organic system of categories.

How far did Kant approximate to such a view of the synthetic process of knowledge? We have already seen how he began, even in the section devoted to the Metaphysical Deduction, to transform and modify the assumptions of formal Logic with which he seemed to start, in order to draw from the analysis of judgment a threefold classification of categories, which he further departs from formal Logic in regarding, not as alternatives, but as "*momenta*" in the process of the determination of objects: and we have seen that he finally indicates that the different classes of categories correspond respectively to a determination of the object of perception in itself, in relation to other objects, and to the mind. How far he saw the organic or systematic unity of this process, however, we cannot discuss, till we have considered the Transcendental Deduction, and the development of the principles of the pure understanding to which it leads.

CHAPTER IV.

THE TRANSCENDENTAL DEDUCTION OF THE CATEGORIES.

Result of the metaphysical Deduction.

IN the last chapter it has been shown that Kant's metaphysical Deduction of the Categories is a failure, or that, in so far as it can be pronounced successful, it is in spite of the supposed "guiding thread," rather than by means of it, that he finds his way to the truth. It is only because he transforms the conceptions derived from formal Logic by the aid of a principle not so derived, that he gets from them anything like what he wants: and even the conceptions from which he starts could not have been found by him in such a Logic, if it had been faithful to its principle of Identity. It follows that the claim of the list to be an exhaustive enumeration of the categories, or even of the primary categories, cannot be made good by a mere reference to the functions of unity in the analytic judgment. It must be considered on its own merits; and it must be verified, if at all, by being traced back to the primary principle of synthetic judgment. Such a verification of it, however, is impossible, until we have seen what that principle is, and how it manifests itself in experience or knowledge. And this it is the business of the Transcendental Deduction to show.

The Deduction in the first and in the second edition of the *Critique*.

The Transcendental Deduction undoubtedly contains the central thought of the *Critique*. It is, therefore, the point on which Kant bestowed most labour, and with his exposition of which he found it most difficult to satisfy himself. In the second edition of the *Critique*, he entirely changed the form of it, introducing into the reasoning an important link which had been wanting in the first edition. On the other hand, he at the same time deprived it of some of

the illustrations and developments of the first Deduction: and in the effort to free it from Psychology,[1] and to make it more distinctly a theory of knowledge, he discarded some of those middle terms which helped to connect it with the ordinary views of the subject. Hence, it is more than doubtful whether, on the whole, any advantage was gained by the new method of treatment. It is a subsidiary inconvenience that Kant neglected to remould the later parts of the *Critique*, and especially his proof of the principles of pure understanding, in conformity with the changes which he had made in the Deduction, thereby making it more difficult to understand the connexion of his thought. In the following exposition I shall try to combine the statements of both editions.

The application of the categories proved to be necessary to a consciousness of objects as such.

The main point which Kant seeks to prove is that the categories or forms of synthesis which belong to the pure understanding have an objective value, because they are the necessary expression of the unity of thought in relation to the 'manifold' of sense, without which the latter could

[1] In the preface to the first edition of the *Critique*, Kant distinguishes the *psychological* question as to the faculties which make knowledge possible from the proper question of the Deduction which relates to the theory of knowledge. "This Deduction," he declares, "has two sides. On the one side it refers to the objects of the pure understanding, and what it aims at is to prove and make intelligible the objective validity of its *a priori* conceptions. On the other side, it considers the pure understanding itself in a subjective point of view as to its possibility, and the faculties for knowledge which it implies. Now, this latter inquiry has great importance in view of my main object, but it is not essential to it: for the main question is always what, and how much, we can know by means of understanding and reason without any aid of experience, and not how the faculty of thinking itself is possible. In dealing with the second question we may be said to be seeking a cause for a given effect, and our answer might therefore be regarded as an hypothesis: and if I take the liberty of having an opinion on such a question, why should not the reader be permitted to adopt a different opinion? In truth, as I am prepared to show, there is really nothing hypothetical in my results: but for the present I am content to preclude the objection by recalling to the reader that, even if my subjective deduction may not have produced in his mind that assured conviction which I expect, yet the objective deduction, which is my main point, will retain all its force: and for this what is said in pp. 92-3 would alone be sufficient." Kant elsewhere declares (*Prolegomena*, § 32) that the "question is not of the origin of experience but of that which lies in it." But this probably refers, as Dr. Vaihinger suggests, merely to Kant's rejection of Locke's explanation of knowledge by Empirical Psychology. Dr. Vaihinger (I. 324) distinguishes from this a "Transcendental Psychology," which investigates the "psychological possibility," as contrasted with the objective validity

not give rise to the consciousness of a world of objects. This expression Kant shows to be necessary for the explanation of knowledge, because without synthesis the consciousness to which impressions of sense could give rise would be only a scattered and unconnected consciousness, and not the consciousness of 'Nature,' as a system of permanent objects acting in definite ways on each other. In fact, they could give rise to no objective consciousness at all. On the other hand, Kant maintains that it *is* possible to explain that consciousness by the aid of a synthetic activity of mind, guided by the categories. This, indeed, seems to make objects dependent on the consciousness for which they exist. But then the materials with which the understanding has to work, and out of which it has to make its objects, are not things in themselves but perceptions which are by them awakened in us: and these, as so awakened, already stand in relation to the unity of consciousness, and thus are prepared to receive that further determination which makes them elements in knowledge as the consciousness of a 'Nature' or objective world.

Self-consciousness possible only through a connected consciousness of objects.

Now, the central point of this Deduction lies in what Kant calls 'The Transcendental Unity of Apperception.'

of the *a priori* principles. Now, it is true that, in order to show that, and how, the pure *a priori* conceptions are objectively valid in relation to experience and not beyond it, it is necessary to consider how they give rise to *a priori* synthesis in relation to the forms and matter of sense: in other words, Kant has to give a theory not of knowledge simply but of *human* knowledge. And this may so far be called a psychological theory, as it deals with phenomena which are relative to our faculties of perception and conception, as contrasted with things in themselves, which would be the objects of an intuitive understanding—an understanding whose thought was at the same time perception. Empirical Psychology, on the other hand, has, in Kant's view of it, to do with the object of inner sense, *i.e.*, with one of the objects of experience, and not with the universal conditions of experience.

The most important difference in the Deduction of the second edition lies, as we shall see presently, in the way in which it is connected with the idea of judgment. Instead of simply *asserting* that the categories, which have been derived from the logical analysis of the act of judgment, are the principles by which the understanding determines objects as such, as he does in the first edition (A. 111), Kant shows that the judgment as such is the expression of the objective unity of apperception (B. 140, § 19). Unfortunately this argument, while it seems to authorise us to regard the categories as determinations of objects, if they have been correctly deduced from the idea of judgment, is fatal to the idea of *analytic* judgment from which they have actually been deduced.

What does this mean? Apperception is a word borrowed from Leibniz, who uses it to designate self-consciousness, and that consciousness of objects which goes with self-consciousness, as opposed to perception, a consciousness of objects which is not 'reflective,' or does not return upon itself and become aware of itself in distinction from its objects. Now, Kant seeks to analyse the process involved in this return upon self, and what he maintains is that it is the correlate of a determination of the manifold present in 'perception,' a determination in virtue of which the elements of that manifold are brought together in, or referred to, a 'Nature' or system of objects. In other words, it is Kant's view that we can be conscious of one self in relation to which all our ideas form a unity, only if, and in so far as, we are able to bind together all the elements of our 'perception' in the consciousness of one objective world. Whatever matter, therefore, there is in my consciousness, it can be present to me, or recognised as part of *my* consciousness, only in so far as it can be connected with the other parts of my consciousness as an element in the consciousness of one objective world. If it were not capable of being thus connected, it would be for me 'as good as nothing,' *i.e.*, it would remain a mere 'perception,' a part of a merely individual and empirical consciousness; but it could not become an element in a consciousness of objects, as such, or be combined with the consciousness of self. Here, therefore, as Kant maintains, we have a *compulsitur,* under which, as conscious subjects, we lay the world as an object of knowledge to us. For we can always say this much of it *a priori,* that nothing can be an object for us, unless it conforms to the conditions under which we can be conscious of ourselves as self-identical subjects in apprehending it. In this way all our consciousness of objects is determined *a priori* in conformity with the conditions of a complete self-consciousness; and whatever predicates it is necessary to attach to objects in order to fit the consciousness of them for being part of the one consciousness of self, these we can attach to them *a priori.* On this consciousness of self, therefore, we can take our stand, and from it we can reason backward to all that is necessary for it, or presupposed in it. We

do not need to wait for the realisation of knowledge to say that the conditions of it must be there; or, in other words, to say that anything that is to be known must be known in such a way that self-consciousness, the consciousness of a self which is the same in relation to it as to all other objects, shall be possible. And if we suppose that, in the individual, a *percipient* consciousness precedes an *appercipient* consciousness, yet it will not be possible for us to account for the latter by means of the former; on the contrary, we shall be obliged to treat the former as conformed *a priori* to the conditions of the possibility of the latter. Hence we may, and indeed must, start with the unity of intelligence with itself as the precondition of all objects for the intelligence; seeing that it is only through their conformity to that precondition that they can become objects for us, or that we can be conscious of ourselves in relation to them.

Pre-established harmony of perception with conception.

"The unity of the manifold in one subject is synthetic: therefore pure apperception puts into our hands a principle of synthetic unity for the manifold in all possible perception."[1] What this means is that, as all the manifold of perception must be present to one subject, so we can say *a priori* that it must be combined together in such a way as to make the consciousness of one self in relation to it possible. And this again implies that, starting from the unity of self-consciousness, we can lay down principles of unity to which perception in all its manifoldness must conform. Even, therefore, if it be admitted that perceptions are given prior to, and independent of the consciousness of self, as well as of all the principles for the determination of objects which are implied in the consciousness of self, yet, as so given, they must be in 'pre-established harmony' with those principles. It is thus only that we can combine the assertion, that the manifold of perception is given *prior* to its being known, with the assertion, that it is for us "as good as nothing," unless it be conformed to the conditions under which it *can* be known. The 'blind perception,' and the 'undetermined phenomenon' which is said to be its object, are ideally separable from the determining conception, but

[1] A. 117.

even in this separation we must conceive the former as standing in such a relation to the latter as to be prepared for subsumption under it. This may be illustrated by a passage from Kant's Logic.

How perception waits for conception in the ordinary consciousness.

"In every cognition we distinguish the matter, *i.e.*, the object, and the form, *i.e.*, the manner in which we know the object. If, *e.g.*, a savage sees a house in the distance, he has the same object before him as a civilised man, who recognises it as a habitation suited for human occupation. But, in form, the consciousness of the one is quite different from the consciousness of the other. In the case of the savage there is mere perception, while in the case of the civilised man, there is both perception and conception."[1]

This example may serve to illustrate how an image may be present to us in perception, and yet waiting, as it were, for the conception under which it is to be subsumed, and to which it is *a priori* conformed. It is, however, necessary to keep in view the distinction between a case like this, and the case in which we have, on the one side, a pure conception[2] which has to be schematised in relation to perception, and on the other a perception, *i.e.*, an image, which has been formed out of the manifold of sense by the synthesis of imagination, but has not yet been determined by any conception, and therefore is not yet referred to any object at all. For in this latter case, it may be a question whether the two elements which are ideally distinguishable can be thought except in relation to each other. This, however, is a point the discussion of which must be postponed, till we have more fully discussed the relation of both conception and perception to the unity of self-consciousness.

All our ideas must be consistent with the possibility of self-consciousness in regard to them.

"The 'I think' must be *capable* of accompanying all my ideas: otherwise there would be presented to my mind an idea of something which could not be thought, and this means that the idea would be impossible, or, at least, that it would be nothing at all *for me*."[3] "The proposition that all the various elements of our empirical consciousness must be bound together in one self-consciousness, is absolutely the first synthetic principle

[1] *Logic*, Introduction, V.; R. III. 197; cf. I. 439; H. VIII. 33; cf. VI. 33.
[2] A. 142; B. 181.
[3] B. 132.

of all our thinking. We must, however, observe that the mere idea 'I,' in reference to all other ideas, (the collective unity of which it renders possible,) constitutes the transcendental consciousness. This idea may be clear or obscure—the question is not of its clearness or obscurity nor even of the actual realisation of it in any shape—but the possibility of the logical form of all knowledge rests necessarily on the relation of ideas to this apperception *as a capacity* "[1] (*i.e.*, to the possibility of self-consciousness). After what has been said, such utterances can cause little difficulty. Kant is insisting on the possibility of all 'ideas' being determined in relation to the conscious self, as the one condition which we can lay down for them *a priori*. Nothing can get into our mind, nothing can exist for us, if it is not capable of being referred to the one self, or determined as an element in its consciousness of itself. Hence, we are authorised to lay down *a priori* for all ideas whatever conditions are implied in this ultimate determination, and we are authorised to exclude from them whatever would prevent it. The data of sense are dependent on affections that come to the mind from without apart from any activity of its own, and hence they may seem to be beyond the reach of any direct determination by our thought. Nevertheless, we are in a position to make certain *a priori* assertions in relation to these data, as taken up into our perceptions: for 'all phenomena,' *i.e.*, all that appears to us through sense, "must so come into the mind and be apprehended by it as to agree with the unity of apperception."[2] Whatever characteristics, therefore, they may have as determined by something independent of self-consciousness, they can have none which are inconsistent with their receiving the ultimate stamp of self-consciousness: and all that is involved in this ultimate stamp may be predicated of them *a priori*.

But this implies a conformity of all sense-perceptions to certain *a priori* synthetic principles.

Now, what *is* so involved? There is involved in this relation to self-consciousness, Kant answers, a conformity of the sense-perceptions both in form and matter to certain synthetic principles, through which they are converted into the consciousness of a 'Nature' or world of

[1] A. 117 *note*. [2] A. 122.

objects. For it is "only as I am able to bind together a multiplicity of given ideas *in one consciousness* that I can be aware of *the identity of consciousness in these ideas*. In other words, the analytic unity of apperception is possible only through a synthetic unity. The thought that these ideas given in perception belong every one of them to me, means no more and no less than this, that I unite them in one self-consciousness, or at least that I am able so to unite them. If it is not itself the *consciousness of the synthesis* of these ideas, it at least presupposes its possibility; for only as I can comprehend all their manifold elements in one consciousness, do I call them all *my* ideas: and, if I were not able so to comprehend them, I should have a self split up into as many parts and endowed with as varied qualities as the ideas of which I am conscious." [1] In other words, the unity which is given to all the perceptions, in so far as they are connected together and related to each other as elements in the consciousness of one world of objects, is the necessary correlate of the consciousness of the identity of the self in apprehending that world. If there were any break between perceptions, so that they could not be connected with each other as referring to one world, there would be a corresponding break in the consciousness of self. As some have imagined that we are in different worlds when we wake and when we sleep, so here there would be a *hiatus* in consciousness, which we might describe as a difference of worlds; this again would involve a *hiatus* in the consciousness of self, which would be equivalent to the existence in us of more than one self: in other words, as more than one self is an absurdity, it would involve the impossibility of any consciousness of self at all. But, Kant argues, this unity of the world is not given to us through sense: the world is one for us only as we make it one. "Combination does not lie in the objects and cannot be borrowed from them through sense-perception, and so taken up into the passive understanding: it is a thing achieved by the activity of the understanding itself, as a faculty of *a priori* synthesis, which brings the manifold of given ideas under the unity of apperception." [2]

[1] B. 133, § 16. [2] B. 134, § 16.

In bringing the perceptions together with each other as perceptions of one object or one world of objects, the understanding also brings them together with the one self as *its* perceptions, and thus only makes possible a consciousness of that self, as one with itself in apprehending all these objects.

Kant interprets the pre-established harmony of Leibniz in his own sense.

But if this is true, then all the forms of synthesis which are necessary to this consciousness of the unity of the world of objects have an *a priori* justification for their application to the manifold of perception. The manifold of perception, in fact, must be in 'pre-established harmony' with them. On this point there is an interesting passage in Kant's answer to Eberhard's criticism of the *Critique of Pure Reason,* in which he even goes the length of attributing his own view to Leibniz.

"Is it possible to believe that Leibniz by his pre-established harmony between soul and body can have meant an agreement between two entirely independent beings, which by no powers of their own can be brought into any relation with each other? That would have been to play into the hands of Idealism in the openest way: for why should we assume the existence of body at all, if it is possible to explain all that goes on in the soul as a working of its own powers, which it might carry on quite as well in complete isolation from anything else. Now, it is not to be denied that the soul and that (to us altogether unknown) substratum of those phenomena which we call body, are things quite different from each other. But these phenomena themselves, as modes of perception, which are determined by the subjective nature of the soul that perceives them, are mere ideas. And as they are mere ideas, we can easily suppose that between the sensibility through which they are presented, and the understanding which is only another faculty of the same subject, there is a community which is regulated *a priori* by certain laws; and this without denying the necessary dependence of the sensibility for its affections upon outward things, and without accepting the idealistic doctrine which surrenders the existence of those things. This harmony between the understanding and the sensibility (which makes possible for us an *a priori* knowledge of the

laws of nature) the *Critique of Pure Reason* has asserted, on the ground that without it experience would have been impossible. For, if the objects of experience were not conformable, as regards their perception, to the conditions of our sensibility, and also, as regards the combination of their manifold, to the principles by which the understanding unites its objects in one consciousness, they could not be taken up into the unity of consciousness or form part of one experience: and that is only another way of saying that for us they would be nothing at all. We cannot, however, give any reason why we should have just such a sensibility, and just such an understanding, as is needed in order that by their joint action they may make experience possible. Still less can we tell why such heterogeneous sources of knowledge should conspire together, not only to secure the possibility of experience *in general*, but also (as will be shown in the *Critique of Judgment*) to make possible an experience of nature *such as we actually have*, under those numerous, special, and merely empirical, laws of which understanding tells us nothing *a priori: i.e.*, why a nature, of which we know nothing except through experience, should yet be found to agree with our understanding, just as if it had been purposely adapted to it. Leibniz, speaking primarily in reference to our knowledge of bodies and in particular of our own body as that through which we are brought into relation with other bodies, gave as the ground for this agreement a *pre-established harmony*. By using this phrase he did not really explain, and could not have intended to explain, that agreement, but only to show that we must think of it as a purposive adaptation, due to the ultimate cause of our own existence as well as of the existence of all things without us; which, however, we are not obliged to regard as an objective pre-adaptation of independent things to each other, but only as a subjective pre-adaptation of our faculties of sense and understanding, in virtue of which they have such a relation to each other as is necessary for knowledge." [1]

The general purport of the Deduction in the first edition.

This "pre-established harmony" of the faculties, then,

[1] R. I. 480; H. VI. 65; cf. R. XI. 57; H. VIII. 717.

means that perceptions must conform to the conditions of their determination by conception, so far as is necessary to the consciousness through them of a connected objective world, or, as Kant puts it, of a "Nature"; which again is the correlate of the consciousness of an identical self. When, however, we look a little more closely into Kant's account of the conditions of knowledge, we find that his so-called "pre-established harmony" amounts to something more than a harmony of independent faculties: that, in fact, he finds one principle at work both in conception and perception, and that this identity of principle is his ultimate reason for their agreement with each other. This becomes manifest when, under the guidance of the Deduction as given in the first edition of the *Critique,* we follow Kant's account of the different elements required for knowledge from the manifold of sense up to the unity of thought. For there we find him showing that, if we take the data of sense as mere passive impressions, and if we ask how we can derive knowledge from them, we are gradually driven on to add new qualifications to these data, until finally we reach the conclusion that they must be determined by the categories, if they are to give rise to that consciousness of objects of which the consciousness of self is the correlate. But this he is able to show only by taking the perceptive consciousness as already determined by the "blind" or unconscious operation of the imagination, the same faculty which, when it ceases to be blind and becomes self-conscious, is called the understanding.

The synthesis of Apprehension in Perception.

Kant begins by observing that the impressions of sense, if we take them as mere passive affections of the subject, can by that subject be neither distinguished nor related. For, though sense presents to us a "manifold," it cannot present it *as* a manifold, and so as held together in one idea, without a synthetic process. "*As contained in one moment,* an idea cannot be anything but an absolutely simple unit. In order, therefore, to make a unity of perception (such *e.g.*, as we have in the idea of space) arise out of this manifold, we must first run through the manifold, and then we must gather it together into one." And this process is necessary, not only in relation to the

manifold of sense, but also to the time and space in which we put the elements of that manifold together: for the pure synthesis of time and space is presupposed in the synthesis of any perception of things as *in* time and space. To have any image of sense, therefore, we require, in addition to the reception of impressions, a synthesis of the imagination, which "takes up impressions into its activity" and without confusing them brings them together in one image; or, in other words, enables us to "envisage" them as one.

The synthesis of Reproduction in Imagination.

But again, when we consider this process more minutely, we see that it involves a continual reproduction of elements corresponding to impressions that have ceased: for, as already stated, the immediate impression can have the value of an element in a perception only when brought into connexion with the other elements, with which it is held together in one consciousness; and mere impressions as such are a flux in which each drives out its predecessor. It appears, therefore, that the successive "apprehension of the elements of the manifold by itself would give rise to no image or connexion of impressions, unless there were a subjective ground to call up a perception, from which the mind has passed to another perception, in connexion with those that follow it, so as to exhibit a whole series of perceptions."[1] But, again, "if ideas reproduced each other without distinction as they happened to come together, no definite connexion of them would be produced, but mere confused aggregations, which could not be the basis of a knowledge of anything. Reproduction, therefore, must be subjected to some rule, according to which an idea in our imagination comes into connexion, or associates itself, with *this,* rather than with *that,* attendant idea." But, then, this means that association itself must have an objective ground, unless we are prepared to say that it is a "mere accident that phenomena fit themselves into such a connexion as is required for human knowledge." In other words, "if phenomena or perceptions were not really subjected to a rule, according to which the elements of the manifold accompany or follow each other in a certain definite order, our empiric imagination would never

[1] A. 121.

get any work to do in conformity with its capacities, but would remain hidden in the depths of the mind as a faculty inert and unknown even to ourselves. If copper were now red, now black; if a man changed now into this, now into that animal form; if on the longest day the earth were now covered with fruits, now with ice and snow, my empiric imagination would never get the opportunity of forming such an association, as when the idea of red colour awakens in us the thought of the heavy copper."[1]

This synthesis is conformed *a priori* to the possibility of self-consciousness, and so to the *a priori* conceptions,

Now, what is the objective ground in question? It cannot be said, Kant argues, that the ground of connexion lies in things in themselves independent of the mind, and that it is introduced from them into the mind through the affections of sense. For the affections as given are isolated, and cannot bring into the mind along with themselves a principle of unity among them. Of the unity of the qualities in the thing in itself, if there be such unity, we know and can know nothing. The thing in itself is that which, by the very idea of it, is out of our reach. We have to do only with the play of ideas in our own minds, and can find no explanation of their connexion outside of the mind. But, starting from the other side, we can say that perceptions *must* come to us in such a way as to be conformable to the conditions under which alone they can form part of our knowledge or consciousness of objects, and so can be brought into relation to the consciousness of self. Now, no perceptions can be so conformed, unless the manifold elements in them have such a tendency to adhere or group themselves together, that it is possible to reproduce each element in connexion with the other elements to which it gives place. For "when in thought I draw a line, or represent to myself the time from the noon of one day to that of another day; or even when I merely seek to set before my thought a certain number, I must obviously, in the first place, apprehend one of the ideas combined in this complex idea after another. But if I always let the elements which come first, escape out of my thought (the first parts of the line, the earlier periods of the time, or the units of the number as they are represented one after another), and if I did not reproduce

[1] A. 100.

them as I advanced to those that succeed, my mind could never by any possibility attain to any whole idea, not even to the purest and most primary of all ideas, *i.e.*, the perceptions of space and time."[1] The association of our ideas, therefore, rests upon what Kant calls their *affinity* or associableness, which itself is presupposed as the condition necessary to their being brought in relation to the transcendental unity of apperception. But this implies that, as received into the mind, ideas are subjected to a synthesis of imagination, which is conformed *a priori* to the possibility of self-consciousness. The imagination, indeed, operates "blindly" or unconsciously, but it operates according to certain rules which make its products capable of being united with the consciousness of self; and when that consciousness comes, all that it does is "to make the function of imagination intellectual," or, in other words, "to bring to conceptions" the synthesis of the imagination. "For, in itself, the synthesis of imagination, though exercised *a priori,* is yet always sensuous. For it combines the manifold only in such wise as it *appears* in perception, *e.g.*, in the figure of a triangle. But in virtue of the relation of the manifold to the unity of apperception, conceptions of objects can be attained by the understanding, though only through the mediation of the imagination, which brings that unity to bear on the perceptions of sense."[2]

because it is the same unity which expresses itself in perception and in conception.

Thus, sensuous perception, in its very genesis, is conformed *a priori* to the unity which afterwards in relation to it expresses itself in the form of a conception. And if we ask for any explanation of this, the only answer is that the unity which underlies the perceptive consciousness is the same as that which underlies the thinking consciousness, only that in the latter case it is not "blind" but self-conscious. "The synthesis of imagination, which is empirical, must necessarily be conformed to the synthesis of apperception which is intellectual, and which in all its pure *a priori* character is expressed in the category: for it is one and the same spontaneity which, in the one case under the name of imagination, and in the other case under the name of understanding, brings connexion into

[1] A. 102. [2] A. 124.

the manifold of perception."[1] Thus "we are able, and, indeed, we are compelled, to lay it down as a rule extending to all phenomena that, as data of sense, they must be regarded as in themselves associable, and as subjected in their reproduction to the laws of a thoroughgoing connexion;"[2] for "they must come into the mind and be apprehended by it in such a way, that they will agree with the unity of apperception."

It is necessary here to take note of Kant's exact point of view. He is asking where to look for the source of that constraint which is laid upon us to combine the elements of perception so as to form complete images,[3] which are reproducible just because their elements are put together in a definite way according to a rule. We cannot, he maintains, refer this constraint to the thing in itself: we cannot say that these elements are so connected in it, and that we perceive their connexion; for such connexion, even if we could conceive it to exist in the thing in itself, would not exist there for us. But, starting from the other side, we are able to say that perceptions must so group themselves in being perceived as to harmonise with the possibility of the consciousness of self, if they are ever to be recognised as ours, or to form elements in that objective consciousness which we call knowledge. And this means that these perceptions must already, as images of sense, have their elements related according to definite rules, which we may discern to be exemplified in them. But this connexion of the elements of perception, which is prior to conception and yet conformable to it, must be referred to an activity of mind; and it can be referred to no other activity than the imagination, which acts according to rule, though it is not conscious of any rule. Hence, although we are obliged to admit that, from the point of view of the thing in itself as apart from our consciousness, we can see no reason why it should affect us in any special way; and though we cannot, therefore, from this point of view, deny that it *might* affect us in such a way that we could never bind the sense-data into the unity of distinct perceptions, made up of definite elements standing in definite relations

[1] B. 162 *note*. [2] A. 122. [3] A. 102, 'Eine ganze Vorstellung.'

to each other; yet we can indirectly exclude this possibility from the point of view of the knowing mind, when we consider what is necessary for knowledge. For if we had such perceptions, we could never determine them as perceptions of anything, and so unite them with the consciousness of self. It is, however, the same subject which thinks and perceives; and, if it is to come to self-consciousness in regard to all its perceptions, its perceptions must be accommodated *a priori* to the unity of self-consciousness, and, therefore, to conceptions. In other words, a rule of combination must be capable of being found in them.

The synthesis of Recognition in conception.

But this already suggests that for *knowledge* something more is wanted than reproduction, or even reproduction according to a universal rule. The rule itself must in some form be present to consciousness. For "without the consciousness that what we now think is the same with that which we thought a moment before, all reproduction in the series of ideas would be in vain."[1] In other words, knowledge implies not only that I take up the elements of a perception successively, and, retaining them, bring them together in an image, but also that I 'recognise' the unity of the object so constructed: and this means that I become conscious of the unity of thought in the process of its construction. "In order to know an object in space, *e.g.*, a line, I must in thought *draw* it, and so by synthesis bring about a definite combination of the given manifold, and that in such a way that the unity of this act is, at the same time, the unity of consciousness (in the conception of a line): it is in this way alone that an object, in this case a particular space, can be known."[2] In other words, I am conscious of the object as one through all the manifold of perception united in it, because, and in so far as, I recognise the identity of the conception which has guided me in the whole process whereby I put the elements of perception together. And the same principle must be extended to the whole content of consciousness; for my consciousness, that it is one objective world which is represented in all my perceptions, is the same thing with my consciousness that it is one

[1] A. 103. [2] B. 138.

thought which has guided me in putting all these perceptions together. Or, as Kant elsewhere puts it, "the original and necessary consciousness of the identity of the self is at the same time a consciousness of an equally necessary unity of the synthesis of all phenomena according to conceptions, *i.e.*, according to rules, which not only make the perceptions necessarily reproducible, but in doing so, also determine an object for such perceptions, or, in other words, fix for us a conception of something in which they are necessarily combined: for the mind could not possibly think, and think *a priori*, its own identity through all the manifoldness of its ideas, if it had not before its eyes the identity of the action by which it subsumes all empirical synthesis of apprehension under a transcendental unity."[1]

General relation of the consciousness of objects to self-consciousness.

Kant's thought, then, may be thus expressed:—The consciousness of an object means the recognition that the imaginative synthesis, whereby the elements of a perception are put together, agrees with a certain conception, and so can be subsumed under it. But when the mind thus carries on its synthesis according to conception, and recognises that it does so, it is recognising that its thought maintains identity with itself through the synthetic process. Hence, what on the one side is the consciousness of the object, is on the other side the consciousness of the identity of the self that knows it. The mind in apprehending the object as such, apprehends really the identity of its own action in the synthesis whereby the object is constituted. And thus in correlation, the consciousness of self and the consciousness of the not-self spring out of the same synthetic act. Or the consciousness of the conception, by which, as its rule or guiding principle, the imagination is determined, so that it follows one order rather than any other, contains in it at once the consciousness that the manifold thus combined is the manifold of a definite object, and also the consciousness of the unity or identity of the self, which by this synthesis apprehends the object. Further, if we carry out this view to its necessary result, we can see that the consciousness of the identity of the self in all its knowledge of objects must depend on all

[1] A. 108.

the manifold of perception being brought under what is really one systematic conception, a conception of Nature as a system, all parts of which are necessarily determined in relation to each other by general laws. In other words, it is the consciousness that the mind, in all the synthesis of its perceptions, is guided by one conception, which underlies and explains, on the one hand, our consciousness of one objective world, and on the other hand, our consciousness, in distinction from and relation to that world, of the identical self which knows it.

Reference to an object means subsumption under a rule.

We may get a firmer grasp of this view, if we consider what is implied when we state that our ideas are ideas *of* something, or that they have an object which "is distinguished from them and yet corresponds to them." How can there be anything of which we have an idea and which yet is not itself an idea? How can we become conscious of that of which the one characteristic is that it is not in consciousness? It is obvious that, when we look at it in this way, the object reduces itself to a mere X,—an unknown and unknowable something, the very idea of which involves a contradiction: "for outside of our knowledge we have nothing which we could set over against it as corresponding to it."[1] There is, however, something more in our thought of the object than this; for we regard the object as the source of a necessity, which attaches to the mode of combination of the ideas through which we know it. "We view the object as that which hinders our ideas from coming in upon us pell-mell or at haphazard, and which determines them *a priori* in a certain definite way: for we consider that ideas, which are to be referred to an object, must necessarily agree with each other in reference to it, *i.e.*, that they must have that unity which constitutes the conception of an object."[2] Correspondence to an object is, therefore, not really correspondence to an unknown X, which would mean nothing: it is correspondence to a conception or known rule of relation between the elements of the manifold of perception, which we combine as referring to that object. This, however, is impossible, unless the perception is such a connected whole that it "could have been produced by a function of

[1] A. 104. [2] A. 104.

synthesis according to a rule, and unless the rule was of such a nature as to fix the manner of the reproduction of the manifold by an *a priori* necessity, and so to make possible the conception of an object in which all the elements of the manifold were combined."[1] In other words, the synthesis of imagination involved in perception must be of the same character as it would have been, if imagination, instead of acting on the data of sense *prior* to the synthesis of the understanding, had from the beginning, been guided by the understanding to produce an image of an object according to a definite conception or rule supplied by itself. If it were not so, if the unconscious synthesis of imagination did not thus anticipate the conscious synthesis of the understanding, it would be impossible for the understanding to form a conception of an object under which the particular image might be subsumed. "So we think a triangle when we are conscious of the combination of three lines according to a rule by which such an image of perception could always be constructed. This unity of rule determines all the manifold, and limits it to conditions which make the unity of apperception possible, and the conception of this unity is just that consciousness of the object (=X) which I think through the predicates contained in the definition of a triangle."[2] The conception of anything as an object is, in fact, nothing but the recognition of a rule according to which the manifold of perception is put together in it.[3] Hence, it is a mere tautology to say that we must always proceed according to the same rule of construction, when we are dealing with the same object. The universality of the rule and the objectivity of the conception are different words for the same thing.

[1] A. 105. [2] A. 105.

[3] To meet an objection which might probably occur, observe what Kant says in the immediate context. "It is this one consciousness, which combines the manifold, successively perceived and then reproduced, into one idea. The consciousness in question may often be weak, so that it is observed only in its effect and not in the activity itself (*i.e.*, we do not connect it immediately with the process by which the idea is produced). Nevertheless, such a consciousness must always be present, whatever it may want in vividness; for without it conceptions, and therefore a knowledge of objects, would be quite impossible." A. 103.

This is the meaning of the constraint which the object puts upon our consciousness.

We may put Kant's reasoning in the following way. Perceptions must come to me in such a way that I can unite them with the consciousness of self. But I can unite them with the consciousness of self only if I can recognise the identity of the act whereby I combine their manifold, *i.e.*, if I can recognise that it is one conception which throughout guides me in putting together the successively given elements of the manifold. Now, it is just conformity to such a conception that makes me refer the manifold to an object. Why? Because in a mere manifold of separate impressions there seems to be no necessity of their coming together according to any rule, and when I discern a rule in their relation, I think of something as constraining them to this definite connexion. But this constraint is not laid upon the perceptions from without but from within, as it is the necessary condition under which alone I can be conscious of them as mine. I cannot be conscious of them at all as isolated elements of perception, but only as I combine them, and recognise the principle of their combination as necessitating that they should be combined in just this definite way. Such a principle alone fills up, and gives meaning to, the empty conception of an object as something which is different from our ideas or perceptions, but which nevertheless determines them to stand in a particular relation to each other. For we are forced to refer our ideas to objects, just because we are forced to combine them according to definite and unchangeable rules, in order to be conscious of them as ours. And the consciousness of them as ours is, therefore, at the same time the consciousness of these rules as determining them *a priori*. Hence, it would appear that we are conscious of an idea as ours only when we have referred it to an object; for only as it is an idea *of* something can it be recognised as our idea.

The subjective in one sense *prior* and in another *posterior* to the objective.

The difficulty of understanding this is that the "recognition" in question seems to consist in referring to something else *than* the self what for the very first time by this very recognition we become capable of appropriating *to* the self. Kant, in fact, speaks, in the first instance, as if he were explaining how that which consciously is subjective ('our ideas') becomes referred to objects; and,

therefore, he seems to contradict himself when he goes on to say that our ideas are capable of being recognised as our ideas only when they are thus referred. But by the purely perceptive consciousness the matter of sense is not really referred to the self at all: its ideas are not for it determined as its own ideas, as something consciously subjective which requires to be objectified. Rather, as Kant shows, they must be objectified, in order that they may be determined in relation to the subject. The being, for whom there are no objects, is not for itself a subject: and our ideas are consciously ours only when they are ideas *of* objects. Language, however, "bewrayeth" us, when we talk of the elements of our conscious experience apart from each other: for we are thus obliged to speak of them as if, thus taken apart, they had that determination which they gain only in becoming such elements. What we call subjective, merely in view of its not being determined in relation to objects, is not consciously subjective; and it can become consciously subjective only in being so determined. In like manner, Kant allows himself to speak of perceptions in general as determinations of inner sense, which they are not for the subject of them, if we mean, "consciously inner": for they can be consciously inner only as distinguished from, and related to, the objects of outer sense. And, in fact, according to the Kantian doctrine just explained, it is just the reference of perceptions to objects,—a reference by which they in one sense cease to be merely subjective,—which makes it possible, in another sense, to refer these perceptions to the self as its inner or subjective experience.

Difficulty thence arising as to the subsumption of perception under conception.

When this explanation is made, a new light begins to be thrown on some parts of the Kantian analysis of knowledge, especially on the priority which Kant ascribes to the synthesis of imagination. It was his view, as we have seen, that imagination has *first* to combine the manifold of sense in certain ways in perception, and that *then* the understanding goes on to "bring this synthesis to conceptions." Now, two interpretations might be given to such language. It might mean merely that the imagination acts on certain principles, which the understanding then brings to self-consciousness. Imagination, on this

view, is the same faculty working blindly and unconsciously, which we call understanding, when the principle of its action is brought to light and consciously applied. There are many passages in Kant which seem to favour this view. On the other hand, it may be urged that Kant often speaks of the understanding, not merely as bringing us to a consciousness of rules which imagination and perception obey, but as itself the source of the rules, under which it then proceeds to subsume the perceptions (as if perceptions in themselves had a nature altogether independent of the conceptions under which they are subsumed). Now, whichever of these interpretations we adopt, we have to encounter serious difficulties,—difficulties, I may add, which lie not merely in Kant's language but in the nature of the subject. For, if we take the former view, that understanding simply analyses the unities produced by the synthesis of perception, we shall have to ask what can be meant by an implicit or unconscious synthesis; and how, if there be such a synthesis, its products can be brought before the understanding to be analysed by it. And supposing this to be possible, we shall have further to ask what good can come out of a merely analytic process, and how it can be said to add to our knowledge; *a fortiori,* how such a process can be said to make all the difference between a mere 'undetermined' perception which is *not* knowledge, and a perception determined by conception which *is* knowledge. On the other hand, if we adopt the latter view, we have to face the opposite difficulty that the perceptions, being given or produced altogether apart from the action of the understanding and its conceptions, can have no necessary correspondence with these conceptions. Nay, we might rather conclude that they cannot possibly have any such correspondence, since, *ex hypothesi,* it is the application of these conceptions which has for the first time to give to perceptions the determination in virtue of which they are referred to objects. It would seem, therefore, that we are between the horns of a dilemma. For *either* there is nothing in the perception akin to the conception under which it is to be subsumed, in which case there is no possibility of so subsuming it; *or,* if there is such an affinity and such a possibility of subsumption,

then the perception as such must have already belonging to it every qualification which it could get from the conception so subsumed.

The appearance of a similar difficulty in Greek philosophy.

In stating the matter thus, we have revived the ghost of a controversy as old at least as the time of Plato—a controversy which almost inevitably arises in some form or other whenever an attempt is made to explain the development of knowledge. It was one of the favourite weapons of that dialectical scepticism, that so-called "Eristic," which sprang out of the conflict of the earliest schools of Greek philosophy, to ask how learning is possible, whether by an (analytic) progress from knowledge to knowledge or by a (synthetic) progress from ignorance to knowledge. In the former case, it would seem to be useless; for if we know, why should we learn? In the latter, it would seem to be impossible; for how is consciousness to go beyond itself and connect the new matter with its previous contents? This difficulty was considered by Plato particularly in relation to that consciousness of the universal to which alone he gave the name of scientific knowledge. If we say that we rise from the consciousness of the particular to the consciousness of the universal, it may be answered that the particular is incommensurable with the universal, and that, therefore, knowledge of the former cannot be made a stepping stone to the knowledge of the latter. If, on the other hand, we say that the consciousness of the universal is presupposed from the first in the consciousness of the particular, then it may be objected that we need not seek a knowledge which we already possess.

Plato's solution of it. The identity and yet the difference of opinion and science.

Plato's solution of the difficulty was that the alternatives of knowledge and ignorance are not really exhaustive. There is a middle term which may be called opinion, and which psychologically is explained as a combination of sense with intelligence, while metaphysically its object is defined as a combination of τὸ ὄν and τὸ μὴ ὄν. An opinion, in short, is a name for a judgment in which a general idea is used to determine a particular, without having itself been made an object of thought. The general idea so used is not, strictly speaking, known or defined, and therefore the use of it is uncertain. Opinion

may be true or false, but in any case it has in itself no criterion of its own truth: it is right, if it *is* right, by a kind of madness or inspiration which can give no account of itself. We are able to bring it to book only by calling attention to the general ideas it uses, and by demanding that those general ideas or universals should be defined. Such definition, indeed, can be got only out of a reflexion upon the particular cases of its application; but it will not result from a mere determination of the common element in all these cases; for the immediate application of the universal in opinion may be erroneous. But the separation of the universal from the particulars itself throws a new light upon them, or is at least a step to clear up the misunderstandings upon which its erroneous application rested. The movement towards definition is, therefore, not only an analytic but a synthetic process, which transforms our view of the very data with which we start, and which seem to be the sole premises of our reasoning. But this process can be easily understood, if we observe that our progress toward definition of the universal is a progress toward self-consciousness, and that, in examining the applications of the universal, we are really bringing to light certain presuppositions upon which we go in our particular judgments, but which it takes no little effort of reflexion to discover. In analysing an idea with a view to its definition, we are, therefore, developing that idea. The idea, after it has been defined, has acquired a new meaning which it had not before; and, therefore, as so defined, it brings a new qualification to the particulars subsumed under it. Here, then, we have an example of a process which may be regarded either as a transition from ignorance to knowledge, *i.e.*, as a synthetic movement of thought, or from knowledge to knowledge, *i.e.*, as an analytic movement of thought, according to the point of view from which we regard it. For the universal must be in a sense known when it is used in a judgment about a particular; yet the first aim of the Socratic *elenchus* is to call forth a confession of ignorance. But this consciousness of ignorance at the same time carries in it a consciousness of potential knowledge; for it is a consciousness that the universal, for which the definition

is wanted, is a principle which we have been always using by virtue of our rational nature, so that to know it we have only to know ourselves.

Different sense in which the Particular is known through the Universal before, and after, reflexion.

The point, then, to which Plato brings us, is that knowledge, *i.e.*, consciousness of particular objects as determined by universals, is not reached merely by rising from the particular to the universal—which is impossible, for we cannot know the particular except through the universal; nor, on the other hand, do we possess the distinct consciousness of the universal from the first, so as to be able to apply it with complete insight. But, as rational beings, we apply to particulars a universal which yet we have never made the object of thought. Hence, the induction from particulars, by which we rise to the definition of the universal, is at the same time a process by which we come to be definitely conscious of the assumptions which underlie our consciousness of these particulars from the first. This is the idea which Plato expresses in the myth of reminiscence. When something is recalled to our memory, we cannot be said either to acquire knowledge of it, or to have possessed such knowledge previously; but our latent or potential knowledge of it is made actual. In like manner, all our progress in knowledge of universal principles is, in a sense, only a discovery of that which we already possess, of that which is bound up with our rational nature and presupposed in all our determination of particular objects. On the other hand, if we had ever apprehended the particular without the universal, it would be impossible for us ever from such apprehension to rise to the consciousness of any universal, by aid of which we could throw new light upon the particulars. Or, to express the same thing in the terms of a later philosophy, if the *a posteriori* were ever given apart from the *a priori*, it would be impossible, starting from the former, ever to come within reach of the latter.

Kant's first solution of the difficulty. Conception is necessary to generalise perception;

Now, Kant's answer to the problem of the possibility of knowledge is *mutatis mutandis* very similar to that of Plato. But, as he starts from a more definitely dualistic basis, he has more difficulty in reaching a consistent result, if indeed he ever reaches it. How, he asks, is the empirical consciousness of particulars as given in sense to be brought

under the pure conceptions of the understanding? To this question Kant, like many other writers, had at one period of his philosophical development given the simple answer, that all general conceptions are derived from the particular objects of sense to which afterwards they are applied.[1] In other words, the synthetic judgments, by which the conceptions of objects are formed, are empirical "judgments of perception." But the inadequacy of this answer was already shown by the criticism of Locke, who, though he assumed that the individual object in all its determination is given in sense, yet denied that the particular judgments which sense authorises us to make, can be legitimately universalised. "General knowledge of matters of fact" seemed to him impossible; and, therefore, all general propositions must necessarily be "trifling," or, in other words, they must express only nominal essences. It is at this point that Kant takes up the question in the *Critique*.[2] In the Introduction, indeed, he still seems to regard experience (*i.e.*, perception) as the source of synthetic judgments, which are the ground of our first conceptions of objects, and the only means whereby these conceptions are to be made more complete—the understanding being for the most part confined to the task of analysing the data which it thus receives from the hands of sense. But in one point, the "empirical synthesis" thus realised, is regarded as falling short of the ideal of knowledge; for it only enables us to make particular judgments, *i.e.*, judgments about the individual object presented to us, and not to rise to necessary or universal truth. For no accumulation of particulars will enable us to reach the universal: no mere inductive process will tell us what *must* be, and, therefore, what will *always* be. Hence, the problem of knowledge, in the strict scientific sense, is the problem of the possibility of an *a priori* synthesis which shall anticipate experience and

[1] This was Kant's view in the period of Critical Empiricism (1763-66). It will be remembered that, at the end of his *Essay towards the Introduction of the Idea of Negative Quantity into Philosophy* (cf. Introduction, Ch. IV., p. 129), he implies that experience supplies us with conceptions in which all synthesis is already done to our hands.

[2] Cf. above, p. 237.

not wait for it. Experience, therefore, is regarded as needing *a priori* principles to extend it to universality.[1] But it is not as yet denied that it enables us to determine particular objects as such, or to add new predicates to them: on the contrary, it is assumed that the difficulty is not in understanding how experience enables us to add to our conceptions of objects, but only how the pure intelligence should enable us to do so. But the point of view thus expressed could not long hold its ground before the advance of criticism; and we soon find Kant making a transition to another view of the relation of perception to conception, for which the way had been prepared by Berkeley. The judgment of perception is merely, *e.g.*, that "this rose is red"; it does not authorise us to lay down any propositions about roses in general, or even about the particular rose when it has ceased to be perceived. If, however, we press home this contrast of universal and particular, it immediately passes into another contrast, viz., that of objective and subjective. Perceptions, if they are merely isolated perceptions, are perceptions of something that is (or is known to be) only at the moment that it is perceived, and cannot have the character of objectivity; for it is just the idea that the object persists or maintains itself and its properties beyond the moment of perception that makes us regard it as an object at all, *i.e.*, as something distinct from the perception itself. If we are not entitled to say that what we have perceived exists *as* we have perceived it for one moment beyond the perception, then there is no ground for distinguishing it from the perception. The *esse* of things is their *percipi*, or the object and the perception fall together: and in the former as in the latter, we have merely a modification of the perceiving consciousness. From this point of view, the transition from perception to experience must involve not merely a communication of universality and necessity to judgments *about* objects, which in themselves are particular and therefore contingent, but a

and, therefore, also to objectify it.

[1] Note the double force of the word synthesis. *Experience* is synthetic, as it enables us to add to our conceptions or to particularise them. On the other hand, the pure *intelligence* is synthetic, as it enables us to add to our perceptions or to universalise them.

reference *to* objects of perceptions, which, as sensible perceptions, are mere ideas or subjective appearances. It is this conception of the relations of sensible or empirical perception to the *a priori* principles of understanding, which Kant sets before us when, in the *Prolegomena,* he makes his well-known distinction between "judgments of perception" and "judgments of experience." "All our judgments," he declares, "are at first mere judgments of perception (*Wahrnehmungsurtheile*): they hold good only for us, *i.e.,* for our subjectivity, and it is only afterwards that we give them a new reference, namely to an object, with the understanding that they shall hold good for us not only at the moment of perception but at all other times, and not only for us but for every subject; for if a judgment agrees with its object, all judgments about the same object must agree with each other. And so the objective validity of a judgment of experience means just that it is necessarily and universally valid," *i.e.,* valid for all subjects at all times. "But conversely," he goes on, "if we have reason to regard a judgment as necessary and universal, (which can never be due to the perception, but only to the pure conception under which it is subsumed,) we must regard it also as objective, *i.e.,* we must look upon it as expressing, not merely a reference of the perception to a subject, but of an attribute to an object; for there could be no reason why the judgment of others should necessarily agree with mine, except the unity of the object, to which they all relate, with which they agree, and which, therefore, makes them all agree with each other."[1] In a judgment of perception, therefore, I "unite perceptions in one consciousness of my state," while in a judgment of experience, I "unite them in one conscious-

[1] *Prolegomena,* § 18. From the point of view here stated, it would be more natural to regard the judgments of perception as analytic. Kant, indeed, says in the Introduction to the *Critique,* that judgments of experience (the same which he here calls judgments of perception) are always synthetic. But when he says this, he is looking at the subject from the point of view of the understanding and its conceptions; and he therefore regards synthetic judgments as those in which the understanding goes beyond its own subjective unity, and beyond the conceptions which are already joined with that unity, to determine objects or to add new elements to the content of the conceptions of them which it already possesses. But in the *Prolegomena,* Kant has been brought by the turning movement of his dialectic to a new point of view, from which the starting point

ness in general"; *i.e.*, without reference to me as an individual subject, or to the special circumstances which condition my perception at a particular time.

Objectivity is thus reached through the universality which the categories give to particular judgments of perception.

The view thus expressed involves at the outset an entire inversion of the usual way of combining the two ideas of universality and objectivity. For, what Kant here teaches is that we cannot reach universality through objectivity, but must reach objectivity through universality; or rather, we must say that the only true objectivity is universality. Or, to bring the question more closely into relation with Kant's mode of expression, the categories can determine perceptions in relation to objects only in so far as they give to the judgments of perception that generality which implies their independence of the particular perceptions, and even of the individual mind as perceiving. We must no longer say that our perceptions agree with each other because they agree with the same object, but we must say that they agree with the same object because they agree with each other.[1] Now, what does such agreement mean? It means that we can assert that a judgment of perception which has been once made, is always capable of being made under the same conditions, because it expresses or involves a relation which is universal. It means that that judgment is recognised as expressing a general law, according to which the elements combined in it are always to be combined whenever they appear. What, therefore, from this point of view the category must add to the judgment of perception to make it a judgment of experience is just the recognition that it expresses a relation, which must always be expressed in the same way; a relation, therefore, which is independent of the particular perception and the particular perceptive subject

lies not in conceptions but in perceptions. Hence, from this point of view, perceptions are supposed of themselves to enable us to make judgments, which of course are merely analytic of the perceptions. Here, therefore, synthesis appears only in so far as the *a priori* conceptions of the understanding enable us to go beyond the particular judgments of perception, and to turn them into universal judgments of experience. Of course, the synthetic nature of the judgments of perception will reappear whenever, by another turn of Kant's dialectic, it is recognised that we must go beyond the data of sense in order to make any judgment whatsoever.

[1] This reasoning is contained in A. 104, which has been already quoted, p. 337.

who makes it, and holds good for 'consciousness in general.' And this is all that is meant by an objective judgment.

But is even a particular judgment possible without the categories?

When, however, we have reached this point, a new difficulty presents itself; for it would seem impossible that even a *particular* judgment should be made without the aid of the category which is supposed only to be required to universalise it. In a judgment the particular always presupposes the universal, and the moment we assert, say, that an object has a quality (*e.g.*, This ball is elastic) we express a universal relation. For, as has been just said, the attribution of a quality to a substance has no meaning, if the substance be not something which exists beyond the moment of perception, and if there be no definite relation between it and the quality, except that it with the other qualities attributed to the same substance forms at a particular moment a complex image of sense. It is just the consciousness that the elements of the idea of perception are combined in a way which remains the same for the thinking subject when the moment of perception is past, or which at least points to a relation that holds good beyond that moment, that makes it possible to express that unity in a judgment at all. This seems to be recognised by Kant himself, when, in the Deduction of the second edition, he points out that the "is," which is the copula of judgment, is the expression of the objective unity of apperception.

Kant finally declares that the judgment as such involves the objective unity of apperception.

"I have never been satisfied," Kant there declares, "with the explanation of judgment given by the Logicians, that it is the idea of a relation between two conceptions. I will not now raise the objection that this explanation is defective, as being adapted only to the categorical, and not to hypothetical, or disjunctive, judgments (which latter express a relation not of conceptions but of judgments); though this oversight leads to many awkward consequences. But I must point out that it tells us nothing about the nature of the relation in question. When, however, I investigate more accurately the relations of the elements of knowledge brought together in every judgment, and when I distinguish it, as belonging to the understanding, from a relation of association, established

according to the laws of reproductive imagination (a relation which has only subjective validity), I find that judgment is nothing but the process by which we bring given ideas to the *objective* unity of apperception. This is just what is implied in the use of the verb of existence as the copula. The use of this verb points to the fact that we are dealing with the *objective* unity of given ideas, as distinguished from their subjective association in our minds; for it indicates that they are brought into relation to the original apperception and its necessary unity, and *that* even where the judgment itself is empirical and, therefore, accidental. Thus in the judgment: "Bodies are heavy" I do not mean to assert that "body" and "weight" as empirically perceived are *necessarily combined with each other*: but I do mean to assert that they are combined with each other *by means of the necessary unity* of apperception in the synthesis of perceptions, *i.e.*, they are combined according to the principles of objective determination, which are deduced from the one ultimate principle of the unity of apperception, under which all ideas must be brought, if knowledge is to be derived from them. Only by subsumption under such principles can the relation of two ideas become one which admits of being expressed in a judgment, *i.e.*, a relation which is objectively valid; whereas a relation of ideas determined by the laws of association could only have subjective validity. For principles of empirical association would not authorise me to say more than that "when I carry a body, I feel a pressure of weight"; they could never authorise me to say that "it, the body, is heavy." For the latter statement is equivalent to the assertion that these two ideas are bound together in the object (*i.e.*, altogether apart from the state of the subject perceiving them) and not merely that in our sense-perception they have been present together, however often it might be."[1]

Hence no judgment of mere perception is possible.

There is a certain inconsequence of statement in this passage, in so far as Kant seems to admit that we are able to make a judgment as to the succession of our own sensitive states under conditions in which, as he at the same time contends, we are not able to make any judgment

[1] B. 141, § 19.

at all.[1] For, on Kant's principle, the sequence of one feeling on another, though it may tend to associate them, will not enable us to make any judgment about these sensations, even that they *are* sequent in our experience; any more than it will enable us to make the same sequence the ground of a judgment as to any other object. But putting aside this inconsequence, the purport of the passage is that perception makes no judgments, but that what is called a 'judgment of perception,' (or in the Introduction to the *Critique*, a 'judgment of experience,') is really due to the subsumption of the manifold of perception under the unity of apperception, as expressed in the categories. As confirming this view, we may observe that the judgment, "Bodies are heavy," which is here declared to be based upon an *a priori* principle of synthesis, is one which in the Introduction was treated as an *a posteriori* synthetic judgment. Either, therefore, the Introduction

[1] There is a further inconsequence in Kant's statement, to which reference has already been made (p. 321 *note*). In the first edition, Kant omits to connect the transcendental, with the metaphysical, Deduction of the categories; for he does not show that the principles derived from the analysis of judgment are necessarily those by which objects are determined as such. He simply shows that, unless there were a connexion of perceptions according to universal and necessary laws, these perceptions could not be referred to objects; and then he *asserts* that the categories supply the principles required for this purpose. "I assert that the categories are the conditions of thought for a possible experience, just as space and time are the conditions of the perceptions which supply the matter for the same experience." (A. 111.) No attempt is here made to show from the nature of the synthesis whereby experience is constituted that his categories are just those required. The Deduction of the second edition, as we have seen, supplies this want, by showing that judgment is essentially the expression of the objective unity of apperception. For this, as Kant argues, entitles us to take the list of logical "functions of unity" in judgment, as a complete index to the metaphysical system of categories. Unfortunately, the new piece heals the rent in the old garment only to produce a worse rent in another place. For the definition of judgment, as being essentially the expression of the *objective* unity of knowledge, cuts away the ground from a metaphysical deduction based on the very definition of judgment which Kant here rejects, viz., that it is an "idea of the relation between two conceptions." Kant's argument, if it shows that the forms of judgment may be a guide to us in determining the categories, at the same time throws more than a suspicion upon a list of categories derived from what now appears to be a wrong view of judgment. If judgment is essentially synthetic, it is absurd to suppose that the conceptions which were reached by those who took judgment as an analytic process, must be the categories, or even that they supply a guiding thread to find them.

must be taken as a merely provisional statement, the inaccuracy of which is purposely admitted by Kant in order not to embarrass the reader too soon with the ultimate results of his thought; or at least, it must be admitted that Kant afterwards recognised it as such a statement. For in the manuscript notes of Kant upon the first edition of the *Critique*,[1] which have been lately published, we find him saying that, when in the Introduction to the *Critique* he had asserted that experience "consists of synthetic judgments," he had merely been referring to the fact that there are such *a posteriori* synthetic judgments, and he had not, therefore, found it necessary to raise the question, how they are possible. "Now, however," he goes on, "we may raise the question how this fact is possible. Experience consists of judgments, but the question is whether these empirical judgments do not finally presuppose *a priori* judgments." And he immediately proceeds to sketch out a proof that they do, which seems to be an anticipation of the ideas expressed in the Deduction of the second edition.

Is even the consciousness of particular images of perception possible without the synthesis of the understanding?

But if we cannot derive from sense, as separated from the understanding, any "judgment of perception" in which definite objects are determined by particular qualities as their predicates, can we derive from it even an image of perception such as might supply the subject for such a judgment? Such a view seems to be suggested in various passages, in which Kant says that sense presents to us images or appearances, which in themselves are only modifications of our own subjective state; and that so long as we confine ourselves to these appearances as subjective phenomena and make no assertion as to their objective meaning, no *a priori* principles of understanding are required. Such principles are needed only when we proceed to refer those appearances to objects which are not states of our consciousness. Now, if we set aside for the moment the question how "mere appearances" come

[1] Erdmann, *Nachträge zu Kant's Kritik*, p. 21, § 33. This passage is quoted by Vaihinger (I. 357), where also the above mentioned change in Kant's view of the judgment, "Bodies are heavy," is noted; and the other passages bearing on the subject are collected and discussed.

to be recognised as such, *i.e.*, how they come to be recognised by us as modes of our own consciousness which have no objective validity, it seems reasonable to say that there can be no doubt of the subjective reality of the phenomena that are presented to us by sense, whatever doubt there may be about their objective reality. There can be no doubt that appearances appear, that mental representations are in our minds, or are presented to us in sense. So long as we conceive such phenomena as a mere phantasmagoria passing before our mental vision, and do not ask any question, or make any assertion, as to their correspondence with any object beyond themselves, so long, it would seem, we cannot be deceived. From this point of view Kant says that "the senses set the planets before us, now as moving onward, and now as reversing their course; and in this there is neither truth nor falsehood, so long as we are content to regard all we see as mere appearances, and to make no judgment in regard to the objective movements."[1] The question of truth or reality arises only when we go beyond the appearances, and make a judgment in which they are referred to an object. So long as the mind *passively* apprehends that which is presented to it, so long it cannot err; for *so long* there exists for it no distinction between appearance and reality, and therefore no possibility of mistaking the one for the other. To render such mistake possible, the mind must be active; it must go beyond what is immediately given in sense and refer it to some object, which perception may represent but which it does not exhaust, and with which, therefore, it is not immediately identical. This object we do not need here to determine, except by saying that it is something which is independent of the particular perception of it, something which exists apart from its appearance. The immediate perception must be referred to something not perceived, must be compared with it, asserted to agree or not to agree with it, ere we can pronounce that it is either true or false, that it gives or does not give knowledge.

No: for the consciousness of an appearance as such involves a judgment.

When, however, we consider the matter more carefully, we see that the statement just made is not strictly accurate,

[1] R. III. 48; H. IV. 39.

or at least is liable to mislead. For it might naturally be understood to imply that we *first* have the consciousness of phenomena as mere appearances to us, and *then* on certain principles refer them, or some of them, to an objective reality. But this is so far from being true that, on the contrary, we must first have a consciousness of reality as a connected system of objects, ere, in opposition to this system, we can think of a particular phenomenon as a mere appearance or mode of our own consciousness. And even when that thought arises, it cannot go the length of an absolute denial of the objective reality of the appearance in question. All it can mean is that a particular appearance has been wrongly interpreted, or put in a wrong place in the context of experience. In the example given, the question supposed to be left undecided is, whether certain apparent movements of the planets are real. But if this be taken to mean that we are hesitating as to their reality, it is obvious that such a consciousness could arise in us only in the form of a doubt, whether a certain interpretation, which had already been given to the sensations, were the right interpretation; whether, *e.g.*, the movements in question had not wrongly been referred to the planets, instead of being referred to the earth on which the spectator is placed. Or a larger doubt might arise, and it might be questioned whether the whole phenomena present to us were not to be attributed to an "optical illusion," *i.e.*, to some abnormal action of the organs of sense excited by the sensuous imagination of the individual; such as we may suppose in the case of a ghost-seer, like Swedenborg. In all such doubts, however, what is in question is, not the objective consciousness in general, but only the place of certain phenomena in it. We find that we cannot combine certain phenomena with the general context of experience, unless we alter our first interpretation of them; and, therefore, we say that they are illusory. But what was illusory was the interpretation, *i.e.*, a mental synthesis which we now find to come into collision with other results of mental synthesis which are more general or better established. The question is one touching the particular, not the universal: it relates, strictly speaking, not to the reality of the facts, but to

their position in the context of experience. For an illusion merely means a reality referred to the wrong place in that context; and the assertion that it is a mere appearance does not mean that it is purely subjective, but merely that the manner of its objectivity is as yet for us undetermined. To suppose, however, that we can go back to certain perceptions or appearances to which no objective interpretation has yet been given, is to suppose that we can have knowledge of that which is "for us as thinking beings as good as nothing." It is "to make oneself in thought into an animal," and yet to attribute to that animal a consciousness of self in opposition to objects.

Perception is then only the presence of an image, which is not for the subject the image of anything.

We have, therefore, here again to guard against the mistake of attributing to sense, or to what we call its object, those characteristics which it can have only for a subject which is not merely sentient. It may be true to say that sense has a content which is merely appearance, *i.e.*, which consists of elements that have not yet been so determined by thought as to yield a consciousness of objects; but it is not true that such a content is determined for us by sense *as* an appearance, or, indeed, as anything whatsoever. Now, the former is obviously Kant's meaning in the beginning of the passage which we have quoted, where he says that "appearance rests on the senses, the judgment regarding the appearance on the understanding," and that "the distinction between reality and dream lies not in the character of the ideas presented (for these are in both cases the same), but in their combination according to the rules which determine the connexion of ideas in the conception of an object, and which therefore form our guides in discovering how far these ideas can be put together in an experience. It is, therefore, not the fault of the appearances when we take illusion for truth, *i.e.*, when the perception, through which an object is given, is confused with the conception of the object or of its existence, which can only be thought by the understanding."[1] Yet Kant's example, as well as his expressions about an "object being given," and even the word "appearance," are apt to suggest another form of the same error which he is combating; namely, that we are

[1] R. III. 47; H. IV. 39.

conscious of the appearance as merely an appearance, before we are conscious of any reality.

But even an image, as a unity of manifold elements, involves a synthesis of the understanding.

When we have got thus far, we begin to see how Kant, starting with the common empirical view, according to which all our conceptions are derived directly from experience and can only be analysed, and not amplified or extended by thought, was led, in the *first* place, to admit an exception to this rule in the case of certain *a priori* principles, from which all the truths of mathematics and the primary laws of physical science are derived; how, *then*, in the second place, he was brought gradually to limit the range of the *a posteriori* synthesis of perception—*first*, to judgments about the particular and contingent, *then* to judgments which express only the *status representativus* of the subject, and *then* to images of sense which do not in themselves imply any act of judgment at all. The last step which it remained for Kant to take, was to recognise that even the images of sense imply a synthesis of pure or empirical data, which is possible only to the understanding, and that in itself sense can only supply a "manifold." And this is the view to which he brings us when he declares that "combination is the one thing which cannot be given through the object, but must be realised by the subject for itself." Hence "analysis presupposes synthesis," and "the understanding cannot analyse (or resolve into simpler elements) any combination which it has not itself made; for no complex whole could be given to the mind, except as combined by the understanding itself." But if this be so, and if we are compelled to reduce the data of sense to an unconnected manifold, which has not even the connexion necessary for an image of sense or imagination, we are thrown upon the other horn of the dilemma with which we started. The activity of the understanding which, in the purely analytic view of it, was useless, has gradually grown in importance, till it is seen that without it neither a singular and subjective judgment of perception, nor even an image of perception, is possible. But as the synthesis of the understanding becomes indispensable, it seems also to become impossible; for we have gradually removed from the perception all those elements in virtue of which it was possible to sub-

sume it under a conception: and between a mere "manifold" as such and the unity of thought, (supposing them once to be separated,) it is impossible to see how any link of connexion could be established.

Again, on the side of conception, a synthetic principle cannot be derived from pure thought.

This difficulty becomes still greater when we look at the metaphysical deduction of the categories, and take into account the way in which in that deduction Kant accepts the doctrine of formal Logic—that the movement of thought in itself is purely analytic, and that it becomes synthetic only in relation to perception. Enough has already been said on the impossibility of deriving the categories as principles of synthesis from the "functions of unity" in the analytic judgment. And it is only necessary here to refer to the way in which Kant tries to make this derivation more intelligible in the *Prolegomena* and the second edition of the *Critique*. In the latter he had, as we have seen, practically surrendered the idea of an analytic judgment, when he declared that judgment is "that action of the understanding whereby the manifold of given ideas (be they perceptions or conceptions) is brought under an apperception." But from this he goes on to argue, not that the idea of an analytic judgment is illusory, but merely that in a synthetic judgment, "all the manifold, so far as it is given in an empirical perception, must be determined in view of one of the logical functions for judgment." The meaning of this expression is explained by a previous passage, in which Kant says that the categories are conceptions of an object in general, by which its perception is determined in view of one of the logical functions for judgment. Thus the function of the categorical judgment is to express a relation of one idea to another as that of subject to predicate. But in so far as the logical use of the understanding is concerned, it is indifferent which of the two ideas should take the place of subject and which of predicate. I may, *e.g.*, say either that "all bodies are divisible," or that "some divisible things are bodies," as I please. "But by the category of substance, when I bring the conception of body under it, it is determined that the empirical perception of a body must always be viewed in experience as a subject, and never as merely a predicate. And so it is with all the

other categories."[1] In other words, Kant, notwithstanding all he has said of the judgment as the expression of the objective unity of apperception, still supposes that we can take it, according to the conceptions of formal Logic, as the expression of a relation of mere ideas in our minds: in which case we can abstract from all relations of subject and predicate, except that which they have as analytically contained, or not contained, in each other. I have, however, already shown that such a view of the judgment cannot stop short of emptying it of all meaning whatever; or, in other words, that such a view must end in an identity in which there is no room for judgment at all. And Kant himself practically acknowledges that purely analytic thought is not thought at all, when he says that analysis has a meaning only in relation to a presupposed synthesis. In the above passage, Kant seems to maintain that conversion is permissible from the point of view of Logic, *i.e.*, when we view subject and predicate as mere thoughts, (for then we abstract from all except the question whether the one idea is analytically contained in the other, and, therefore, it does not matter which idea occupies the place of the subject); but that it is not permissible when the judgment is taken as expressing an objective relation; for then the position of subject and predicate corresponds to, and expresses, the relation of substance and accident. To this it might be answered that the position of subject and predicate is not indifferent even logically, unless we quantify both, and say "some divisibles are all bodies," or, "all bodies are some divisibles"; and this, as we have seen, is a step toward that extinction of the judgment, which is the nemesis of formal Logic. On Kant's own showing, a judgment of pure thought is a judgment in which nothing is said; for pure thought can say nothing but that "A is A." Only such a judgment can be converted without change of subject or predicate, but that is just because it is no judgment at all. On the other hand, if we admit any difference between subject and predicate in the judgment, we necessarily take it as the expression of a synthesis, and, therefore, as the assertion not merely of a subjective relation of thought, but of an objective relation of fact.

[1] B. 129.

Hence conception and perception seem to be left in hopeless disunion.

In this way we are brought to the conclusion that the abstraction of an analytic intelligence, which becomes synthetic only in relation to the manifold of sense, is as unreal as the abstraction of a manifold of sense, which is in itself unconnected, and which derives all its connexion from the action of the understanding. In addition to the difficulty of bringing the manifold of sense together in such a way that it may be subsumed under the pure conceptions, Kant's conception of the analytic nature of thought loads him with the further difficulty of making the barren unity of the intelligence develop into conceptions of relations under which the associated manifold may be brought; and thus he becomes entangled in a problem the exact reverse of that with which, in the first instance, he had been dealing. The gradual process of abstraction by which, on the one side, he has emptied the data of sense of all principles of connexion, and on the other side, has deprived pure thought of all claim to synthetic movement, has enabled him to refute both the rationalistic and empiricist views of the origin of knowledge, and to prove that both factors are necessary to experience. But, while he has shown that both factors are indispensable, he has made it harder than ever to explain how they can be brought into that relation, which is required for knowledge. Are we then to say that in the energy of his counter-attack upon the enemies who were threatening him upon either wing, Kant has broken his army in pieces, and left the centre undefended? In showing that neither Rationalists nor Empiricists can explain knowledge, has he left room for himself to explain it by uniting the elements which they separated; or has he left nothing but the *disjecta membra*, to which it is impossible to restore the unity of life? In any case, it is this recombination which he attempts in the Transcendental Deduction.

We can escape this conclusion only by denying that either perception or conception exist out of the unity of the judgment.

Now, up to a certain point, it is possible to explain the emphasis which Kant lays on the opposition of perception and conception, sense and understanding, without supposing that he admits anything inconsistent with their necessary unity, as factors in one experience. For, on the one hand, it is only as separated from perception and

at the same time referred to it, that conception gets its power as a principle of knowledge; and in like manner, on the other hand, it is only as separated from, and at the same time referred to, conception that perception becomes a datum to which conception can be applied. Knowledge, Kant rightly maintains, is judgment, and judgment implies the determination of perception by conception. It seems, however, as if this determination could not take place unless perception had already in it the unity expressed in the conception; *i.e.*, unless perception already had the unity which it cannot have *till* it is determined by the conception. And it seems also as if conception, in order to determine perception must have already in it a diversity, or a relation to diversity, which it cannot have *till* it determines the perception. The act of judgment would thus involve, from one point of view, a combination of perception and conception which presupposes their differences; and, from another point of view, a distinction of conception and perception which presupposes their unity; for each of its elements can be related to the other only as it has the other implicit in it. Or, to put it otherwise, conception and perception both appear to presuppose the judgment, yet they are the very elements brought together in the judgment.

Imagination as the mediator between them.

This difficulty, as has been already indicated,[1] Kant tries to get over from both sides by the interposition of a third element, which appears on the stage without notice, viz., the imagination. On the side of perception, imagination is the power which combines the manifold into an image, which is thus made capable of being brought under the unity of understanding: while on the side of understanding, it schematises the categories and so brings them into potential relation with the manifold of sense. In virtue of the former synthesis, time, space, and all the "manifold" elements given under both these forms, are combined into definite individualised images. In virtue of the latter, the forms of analytic judgment become principles of unity which can be applied to those images, and in relation to which, therefore, those images may be "brought to conceptions," or recognised as containing a

[1] Above, p. 301.

unity that corresponds to conceptions. Further, if we ask how it is that the principles of unity in perception and in conception correspond with each other, Kant points to the fact that both are derived from the same self, which as sentient perceives, and as intelligent conceives.

Kant's way of reaching the unity from a presupposed difference.

Now, what is indicated by this complex system of mediation? It points to that circle of presuppositions which I have already expressed by saying that, while it is only as referred to each other in the judgment that perception and conception exhibit those characteristics by which we distinguish them, yet, on the other hand, the judgment presupposes both perception and conception as elements which it refers to each other. This circle, however, is simply the result of the attempt to trace back the unity of the judgment to two elements which yet, as such elements, have no existence apart from that unity. To get over this difficulty, Kant first recognises that the unity which expresses itself in conception is present also in perception, as it is the same self which at once conceives and perceives. Yet, secondly, he is compelled to add that this unity is not present in perception and in conception in the same way; for in the former it is only a principle of association, the highest product of which is an individual image, while in the latter it is a self-conscious unity, which, therefore, expresses itself in "conceptions of objects in general." Lastly, he conceives the integration of the two elements as a subsumption of the image under the conception, which is schematised for that purpose by the productive imagination. But "it is one and the same spontaneity" which, "under the name of imagination," produces the empirical synthesis of apprehension, and, "under the name of understanding," subsumes the perception so produced under the conception. We have, therefore, a 'pre-established harmony' of the faculties and their products, based on the unity of the self which underlies each of them and which brings together the products of both in the unity of knowledge. For the self, in this double manifestation of its activity, must always remain in harmony with itself, as otherwise it could not be conscious of itself as a self at all. And it is only as the image is recognised as conformable to the categories, by which the

understanding determines objects in relation to the self, that it can "be united with the 'I think' of consciousness."

The pre-established harmony carried back to a unity.

The most important point to notice in this theory is the way in which Kant, on the one hand, distinguishes the unity of perception from the unity of conception; yet, on the other hand, maintains the ultimate identity of the principle manifested in both. It is, he says, due to the same spontaneity which, however, acts in different ways in the two cases; in the one case, by an unconscious activity, gathering the data of sense into one image, and ultimately into one imaged continuity of a world in space and time: in the other case, by a conscious activity, producing (in relation to this pictorial unity of perception) a number of pure conceptions, which in their combination constitute the idea of Nature as a system. Now Kant speaks of the latter, the conceptions that spring out of the unity of the apperception, as an 'Epigenesis' upon the former,[1] which must mean that they are not a simple extension of what existed before in the perceptive consciousness, nor an external addition to it, but a new development in which the same principle reaches what Schelling called a 'higher potency.' If apperception is thus a development of the same activity present in perception, it is not difficult to understand how the images of the latter should be adapted *a priori* to conceptions which are 'the species of apperception.' What prevents this view from being perfectly intelligible is only the thought, which still holds its ground, of an external application of the conceptions to the perceptions. But a 'pre-established harmony' of perception to conception could only exist for a consciousness which, while it distinguishes these two forms, transcends the opposition between them. And though the understanding generally appears as one of the two terms opposed, yet there are many passages which imply that it also over-reaches, "under the name of imagination," the gulf which seems to be fixed between it and sense. For its application of the conception to the perception is at the same time declared to be a "recognition" that, as the result of its own unconscious action, the conception is already involved in the perception.

[1] B. 166.

Perception not prior to conception in the sense it has as subsumed under the conception.

But the key to the whole difficulty lies in the fact, not clearly recognised by Kant,[1] that sense, as it can exist in a being which is not self-conscious, does not correspond to perception, as it exists in beings who *are* self-conscious, any more than it corresponds to conception. In one point of view a merely sensitive consciousness is capable *neither* of conception nor of perception, as these appear in our consciousness: in another point of view, it possesses the germ or beginnings of *both*. In the sensitive being, in fact, the two elements, which in us are distinguished as conception and perception, are not yet separated: it has a consciousness therefore in which we cannot find either in its distinguishing characteristics. For the severance of the two elements from one another gives to each of them a new qualification. The sensitive consciousness maintains its unity with itself and we may add, *feels* its unity with itself, through all the changes of its states; but it does not distinguish that unity from, and relate it to, those states. When, however, the 'lightning of subjectivity' (to use a phrase of Hegel) breaks this charmed sleep of

[1] That it is not clearly recognised is involved in the fact that, though Kant says that perception apart from conception is for us 'as good as nothing,' he yet draws a line of distinction between what is actually united with self-consciousness, and what is *capable* of being so united; and seems to suppose that the latter, though actual as a perception in us, is yet still in the condition in which it would be in a consciousness which did not think but merely perceived. Thus, he asserts that conformity to the unity of self-consciousness, and so to the categories, is the condition without which nothing can be brought within the sphere of an intelligible experience: but he does not seem to recognise the change that is made in perception, so soon as it has entered this sphere. In other words, he does not distinctly realise that, as distinguished from, and related to, conception, perception is not what it was, or could possibly be, in a being that merely perceived. Yet, it is the most important effect of the transcendental Deduction, and of Kant's whole method of dealing with the subject, that it enables us to realise the truth, that the development from consciousness to self-consciousness is not merely the addition of the latter to the former, but at the same time the transformation of the former in relation to the latter. Something like this indeed is essentially in the idea of an organic development in all cases, and *a fortiori* in the case of the development of intelligence. In what is here said, it is not meant to deny that sensations exist in us as beings who are developing out of the sensitive into the self-conscious life, and my contention is only that sensations, as part of our self-conscious life have already become perceptions, and that as perceptions they are already determined in relation to conceptions, which may, as Kant says (A. 103), be 'wanting in clearness,' but are never entirely absent in any consciousness of objects as such.

sense, it brings with it a distinction of the self from its sensitive states which at the same time become perceptions of objects. But this is possible only if the manifold of perception is combined according to a conception which is at once distinguished from it and predicated of it. Hence, as Kant points out, the recognition of the perception as falling under a rule, and the reference of it to an object, is one and the same thing; and this reference again makes possible a consciousness of the self, as having the idea of an object through the perception. Thus the same change by which sensations become perceptions gives rise to the distinction between conceptions and the perceptions of which we predicate them, *i.e.*, the distinction of the activity of thought from the matter which it combines, or recognises as combined, in the idea of an object: a distinction which finally is presupposed in the consciousness of the self as having these ideas. Thus the self is not first conscious of having ideas which it then refers to objects; but, on the contrary, it is only as it refers its 'ideas of perception' to the objective world which is known through them, that it can be conscious of them as its own ideas. The ego can claim as its own its sensitive states only in so far as it separates itself from them, and refers them to the objective connexion of the world it knows. They are its own, or capable of being known as its own, just as it rises above them and refers them to objects. For, as mere sensations they would not be ideas which we could refer to objects and so unite with self-consciousness: they would be only events taking place unknown to us, in our sensitive organism. On the other hand, the objective world, to the consciousness of which the consciousness of self is correlative, cannot be presented to us as a mass of isolated particulars. To put it in Kant's phraseology, it is necessarily subjected to the categories as the condition of its being united with self-consciousness. Thus it comes to be determined as a system, all the elements of which have their character fixed in relation to the other elements according to universal principles. For there can be nothing for the self, which is not fixed as an element which is permanent with the permanence of the self, and which is not in this permanence determined as an element in

the one world to which the consciousness of self is correlative.

In what sense it is prior to conception.

When, in view of what has been said, we make the necessary corrections in Kant's doctrine of the relation of perception to apperception, the result may be thus stated: —The advance from consciousness to self-consciousness, from perception to apperception, is in one point of view analytic, in another synthetic. There is a sense in which it may be said that the matter remains the same, not only in the consciousness of the savage and the civilised man (as Kant says in a passage already quoted[1]), but even in the consciousness of the animal and the man; and that the change is only in the form. Yet, in truth, this formal change is equivalent to a complete transformation of the matter. The life of an animal (supposing an animal not to be self-conscious) is in unity with itself through all the difference of its states. It is not conscious of itself in distinction from its states, but through all the various feelings and images that may be present to it, it preserves the continuity of its feeling of itself unbroken. On the other hand, the life of a self-conscious being is a life in which the unity is constantly broken, yet continually restoring itself. Self-consciousness is always a *return* into the identity of the self from the difference of its objects. This return, indeed, presupposes the unity to which the return is made: yet with some truth it might be said that in its highest form that unity does not exist except in and through the return. The unity of a merely conscious or merely sensitive life does not fully deserve the name of a self, since it does not exist *for* itself as an object, and does not, therefore, really recover itself out of the difference in which it is immersed. It *is* a universal in all its particularity, in so far as the unity of its life maintains itself in all the change of states; but it is not a universal *for itself*, as it does not distinguish itself from, and relate itself to, objects through them. But the self-conscious being exists for itself as this universal individual. It is for itself—not merely for another—as this permanent identical self through all differences and changes of its states. This, however, it can be only as it separates itself

[1] See above, p. 325.

from them and so becomes conscious of them in their separation from each other, while, at the same time, it binds them together as elements in one objective consciousness. We can ideally distinguish the two movements in the progress from the sensitive to the self-conscious life: first, the withdrawal of the unity of the sensitive life by which the sensations or images become an unconnected manifold; and, secondly, the recombination of them as elements in the consciousness of one objective world, which is the correlate of the consciousness of self. But these two movements cannot be really separated; for the withdrawal of the unity from the sensitive life is, at the same time, the dawning consciousness of the objective world, to the connexion of which its elements are referred: and the subject for which the manifold can exist as a manifold, must already have brought that manifold to a unity in one consciousness. At the same time, it is natural to start with the manifold as given prior to the synthesis whereby it is united in one consciousness; for self-consciousness, as contrasted with the simple unity of the life of a sensitive subject, is, in its idea, a *restored* unity, or rather a unity which restores itself out of the dualism and opposition in which it begins. That dualism, however, cannot be absolute even at the beginning of a conscious life,—*i.e.*, it cannot be such as to leave a mere manifold on one side and a bare unity on the other,—otherwise it would be a division which could never be healed. Even in our earliest apprehension of the world, it is *one* world in *one* space and *one* time, in spite of the infinite and apparently unrelated manifoldness of its changing phenomena; and the self which is opposed to it, is yet related to it in such a way as to make its difference a perplexing problem. From the earliest dawn of intelligence the world *as perceived* is a mystery, perplexing man with its opposition and unlikeness to himself, yet, on the other hand, stimulating him, by its relationship and likeness, to vague anthropomorphic explanations of its phenomena. For even in his simplest perception of it, the world, in spite of its manifoldness, is represented as a unity; and the growing consciousness of the unity of the self as opposed to it, is a stimulus to develop the conception of that unity. While, therefore,

in one point of view, we may say that the mind seeks its own unity in the world, in another point of view what it seeks is only to discover what the given unity of perception is, or, in other words, to 'bring to conceptions' the blind synthesis of perceptions, *i.e.*, to recognise the principle which already is in action in that synthesis. But in using such language we have to remember (what has been already indicated) that, as self-consciousness is a return to an identity which comes to exist as such identity only in the very process we call a return, so the recognition of the conception as the principle of the synthesis of imagination in perception, is the recognition of that which, as such principle, has never been known before. Further, we have to observe that the perception from which the return is made gets its qualification as an object, which can be subsumed under the conception, only in relation to the conception which is thus separated from, and related to, it. It is Kant's imperfect apprehension of the organic nature of consciousness and of the consequent dialectical character of its development, in which each movement implies all the others, that here embarrasses his statement, leading him to speak as if one operation were completed before the other begins, and to overlook the way in which all the different *momenta* reciprocally imply each other. This especially is what entangles him in difficulty in dealing with the relations of the conscious synthesis of conception to the blind synthesis of perception. For, though the latter, without the former, could at the most give rise only to the unity of an image, yet Kant, in view of the necessary subsumption of the image under a conception, goes so far as even to attribute to it a judgment.[1] In truth, to the conscious self, perception necessarily takes the form of a judgment; but when it takes this form it, at the same time, becomes possible to separate from it the principle of its unity and to use that principle as its criterion. The determination of things as objects of perception, therefore, is not only a separation of perception from conception, but at the same time it involves the possibility of a further advance, in which conception is our guide in reconstructing the perceptive consciousness. In this way the

[1] In the *Prolegomena*, § 18. Cf. above, p. 347.

opposition between consciousness and self-consciousness, between perception and apperception, becomes the stimulus to a progressive movement by which that opposition may be removed. But this whole process would be impossible, if the opposition had been absolute; if the terms so opposed were not essentially related to each other; if the division with which self-conscious life begins did not imply in the very statement of it the unity of intelligence. To find the key to Kant's alternate analysis and synthesis,—to his alternate opposition and reconciliation of the elements of the intellectual life and the intelligible world, which it is as fatal to confuse as to isolate,—we need only to keep before us the idea of that organic unity in difference which he never fully expresses, yet to which it was his main merit to direct the attention of philosophy.

Kant's imperfect conception of the organic unity of the intelligence, and his negative view of the return of consciousness upon itself.

The simplest statement that can be given of Kant's proceedure in the Deduction is that, while he masks the idea of an organic unity of the intelligence under the form of a reciprocity of action and reaction of its different faculties, he is obliged to bring in the unity of these elements as a kind of *deus ex machina* to supply a link between them. Thus he starts with a thing in itself, which affects the subject, and so produces a series of changes in its sensibility. As against this differentiation introduced into it from without, Kant conceives the self, in virtue of its unity, as showing a kind of self-defensive power of synthesis, by which it takes up and combines the impressions into one image, and then becomes conscious of its own activity in so combining them. In this way the manifold, as manifold, is *separated* from, and opposed to, the self as a self-identical unity; while yet, as combined into the consciousness of one objective world, it is *related* to that self and capable of being made a part of its self-consciousness. In other words, Kant thinks of that return of the subject to itself, whereby it becomes self-conscious, as the result of the process whereby it unites the manifold into one consciousness of objects. Thus the analytic judgment 'I am I' (through all the difference of my ideas) is dependent on the synthetic judgment which, combining all the manifold elements of perception into one consciousness, makes it possible for the unity of the self

to become a self-conscious unity. If, however, we view the whole process in this way, starting from the dualistic hypothesis of two things in themselves, an object in itself and a subject in itself,—the former of which gives a repeated 'Anstoss' to the latter from without, while the latter reacts on the affections thus produced, and by synthesis of them produces a correlative consciousness of the object and of the subject as phenomena,—we are obliged immediately to recognise that both of these things in themselves lie outside of the unity of knowledge. It can, therefore, only be some defect in the unity of this correlative consciousness of subject and object, which suggests that its terms are phenomenal, and that they must be referred to two independent things in themselves. In other words, the dualism of a noumenal subject and object *out of* our knowledge is made necessary for Kant by the imperfection of the unity of the phenomenal subject and object *in* knowledge, which again, as a conscious imperfection, implies that knowledge does not correspond to its idea. But what is that idea? It is, as Kant frequently tells us, the idea of an intuitive or perceptive understanding—an understanding in which the difference of perception and apperception, of consciousness and self-consciousness, either does not exist or is transcended. In our consciousness, as Kant maintains, the forms of sense, like its matter, stand unrelated to the conceptions under which they are brought; and these again, though derived from the forms of judgment, and so from the analytic unity of self-consciousness, are yet so far dependent on the unity of the self being brought in relation to an extraneously given manifold, that their number and nature cannot be explained from that unity alone.[1] It appears, then, that the subject reacting on the manifold, which is forced on it from without, according to peculiar forms that belong to its peculiar sensitive constitution, synthetically combines that manifold; and that in opposition, though in relation, to the objects so determined it becomes conscious of its own self-identity. But this return upon its own pure identity, upon the 'I am I' of pure self-consciousness is, in Kant's view, a negative return, *i.e.*, it is the recovery

[1] B. 146.

of the bare identity of self out of the foreign element in which it has become involved through its connexion with a sensibility. The final effect of this synthetic action of thought and of the return from it upon the unity of the self is, therefore, not to appropriate to the self the matter of sense taken up into consciousness, (which is impossible owing to the alien nature of that matter) but to repel it, and with it the phenomenal world of objects, (the consciousness of which has been attained through synthesis) from the self. Nay, the recoil even points beyond the analytic judgment 'I am I' to a simpler identity; since it is recognised that it is only by means of the synthetic unity that the analytic unity exists as a *judgment,* in which subject and predicate are distinguished. But when the intelligence thus draws back upon its analytic unity, or upon an abstract identity which is even simpler than that analytic unity, the movement of abstraction necessarily carries with it the condemnation of all our empirical knowledge as imperfect and inadequate to its idea. For the intelligence, conscious of its pure unity with itself, repels experience from it as involving a synthetic unity in which difference is never completely overcome. Thus, the dualism of the subjective thing in itself and objective thing in itself *out of knowledge* ultimately rests on the discordance of empirical knowledge with the ideal which the mind carries with itself in self-consciousness.

Is his ideal of knowledge an abstract identity which is neither conception nor perception, or an intuitive understanding which is both?

Now, in an earlier chapter it has already been pointed out what this means. It means that Kant, recognising the opposition of perception and conception, and the impossibility of taking either in its abstraction as absolute truth, falls back by a still further abstraction upon an ideal of truth which is most nearly represented by the analytic judgment of pure self-consciousness. The ideal of knowledge, according to this view, would be, that the object should be one with the self that knows it, as the object self is one with the subject self in pure self-consciousness. As, however, even in pure or analytic self-consciousness there is a dualism, which is due to its relation to the consciousness of objects, the ideal carries us still further back, to the negation even of this difference in a unity in which there is not even the distinction implied in the

judgment 'I am I.' But, as I have already shown, this regress upon a unity, which is neither perception nor conception, but both in one, has implied in it an unconscious logic, which is exactly the reverse of its explicit reasoning.[1] It is stated by Kant as an abstraction from both perception and conception, and this would logically bring us to a bare empty identity; but really it is a recognition that the truth is to be found only in a unity which includes both. Hence, Kant silently substitutes for the idea of a pure unity that is *neither* perception *nor* conception, the idea of an intuitive understanding which is *both*. And it is only as he does so that he can get from it that ideal of knowledge which he opposes to experience. For it is impossible that by mere abstraction we can reach a point of view from which we can see the limitation of that from which we abstract. Such a point of view we can find only in a unity in relation to which the opposition of conception and perception sinks into an opposition of elements which imply each other. Only as we are able to rise above the *relative* or *imperfect* unity of perception and conception in experience to a principle which is capable of turning it into an *absolute* unity, can it be possible for us to see its relativity and imperfection. Or if, in relation to the unity of self-consciousness, we can see the phenomenal character of the objects of experience, self-consciousness must be itself a principle which will ultimately enable us to turn knowledge of the phenomenon into knowledge of the noumenon.

If the latter, pure thought cannot be analytic.

To show that this is so, it would be necessary to get rid of Kant's idea that the movement of thought in itself is purely analytic; and that, therefore, synthesis must always be the combination of a manifold which is external to the unity implied in such synthesis, and capable, therefore, only of an external or mechanical combination. In opposition to this view, we should have to show that even the pure unity of thought, the pure consciousness of self, is essentially synthetic; and that, therefore, while it is true that the comparison of it with the relative unity of experience may bring to light an ideal which is not realised in ordinary experience, or even in science, yet the ideal

[1] Cf. above, p. 172 *seq.*

so disclosed does not stand in irreconcilable opposition to that knowledge which it thus enables us to criticise. On the contrary, it contains a principle for the correction of the defect which it discloses.

Kant's argument necessarily implies that it is synthetic.

Now, the first step in the proof of this thesis is taken by Kant himself, when he points out that the analytic unity of apperception presupposes the synthetic unity; for this is practically equivalent to saying that there is *no* purely analytic unity. In the judgment, 'I am I,' subject and predicate are the same, and in view of this identity it might be said to be an analytic judgment; but a consciousness which returns upon itself, or reduplicates itself in the manner expressed in that judgment, involves a synthesis, seeing that it is in this return that the ego, strictly speaking, comes into existence; for only that being is truly to be called an 'I,' which calls *itself* so. Self-consciousness is not *merely* the consciousness of the unity presupposed in the consciousness of objects; or at least this unity acquires a new qualification in the process whereby it becomes conscious of itself. In other words, the dual unity reached by the process is not the same with the undifferentiated unity which that process presupposes. Hence, it is not merely that, as Kant says, the analytic unity implies the synthetic, not merely that the consciousness of the identity of its own action in the synthesis whereby all perceptions are made elements of an intelligible experience, contains in it as an element the consciousness of the self as identical. The judgment of self-consciousness is *itself* synthetic, in so far as the 'I' which seems to be presupposed, is really the result of the judgment; or, at least, gets in the very act of judgment a higher meaning than it has as the mere presupposition of that act.[1]

[1] We find that Kant himself reduces the ego to an indeterminate something ("=X, he or it that thinks"), when he considers it as the mere subject, in abstraction from its consciousness of other objects and of itself as an object (A. 346; B. 404). But the judgment 'I am I' is analytic only in the sense that its synthesis is perfect, *i.e.*, that the difference in it has become transparent. And it is really this (as we shall see hereafter) that makes it the source of an ideal of knowledge which is not satisfied by the imperfect synthesis of experience. But for Kant it is analytic, because he regards self-consciousness simply as the *recognition* of a unity which is prior to the consciousness of objects, and not as the

How the recognition of the synthetic movement in self-consciousness transforms our view of objects and of the self.

On the other hand, it is also true that this synthesis of self-consciousness implies a previous synthesis with which its transparent unity is contrasted; and that the judgment, 'I am I,' correlates with a consciousness of the unity of all the manifold of perception in one objective world. For it is only because I am able to put all objects into one 'context of experience' that, in spite of the variety of that experience, I can be conscious of one self; and an empty 'I am I,'—a judgment of self-consciousness which did not involve at the same time a consciousness of a world of objects,—would be impossible. But the transcendental criticism which reveals this correlation obviously leads to a change both in our consciousness of objects and in our consciousness of self; for it teaches us that the determinations which we gave to objects, when we considered them merely in themselves or in their relations to each other, are not sufficient. In showing us that objects are phenomenal, *i.e.*, that they are existences for a self, it at the same time shows what their reality is; *i.e.*, it shows that they are not taken rightly, till they are regarded as elements in a process of existence which must finally reveal itself as a spiritual process.[1] On the other hand, it also changes our view of the self; for, while in our first consciousness of it the self is taken as exclusive of objects and independent of them, now we see that this exclusive or negative relation, presupposes a positive relation and so a unity beyond the difference of object and subject. We are, indeed, conscious of the self only as we return upon it from, and oppose it to, objects; but this opposition must be taken as relative and not absolute, else it would not be a *conscious* relation at all. Hence, when we are conscious of the self merely in opposition to

ultimate form into which that unity develops *through* the consciousness of objects: a form, it may be added, in which it for the first time reveals itself distinctly *as* an ego or self; for, if we are to speak with absolute precision, we must say, only a self-conscious subject can be called a self.

[1] It shows this, I mean, in so far as it can be shown by general reasoning without being actually realised in a complete systematic view of the universe, which, of course, is impossible. If, *in this sense*, it is called a reasonable faith and not knowledge, I should have nothing to object. But in this sense all knowledge of the universal is a faith, and all knowledge of the particular is also a faith so far as it is built upon that knowledge.

objects and therefore as a pure self-identical unity, in what Kant calls the analytic judgment of self-consciousness, we are not fully aware of what is involved in our own thought. In being conscious of its opposition to objects, the self has transcended that opposition; and it is unaware of what itself does and is, so long as it considers that opposition to be absolute. Hence, just as the consciousness of the object was imperfectly developed, when the object was regarded as a thing in itself independent of the subject that knows it; and as that consciousness and its idea of its object required to be corrected by a 'transcendental reflexion,' which called attention to its relation to the subject, so it is here with self-consciousness. The consciousness of self cannot be considered to be perfectly developed, or the self to be fully aware of what it really is and does, so long as it rests in the idea of itself as a simple self-identical subject apart from objects. In other words, it is not completely self-conscious, till it recognises that, (as it can exist for itself only when the object exists for it,) the consciousness of the object is an essential element of the consciousness of self; and the consciousness of self *is* therefore not merely the consciousness of a self-identical subject opposed to the object, but it is also the consciousness of a principle which underlies the consciousness of the object. While, therefore, it is only through its relation to the self that the object comes to be known as it really is, or, we might even say, comes to the consciousness of itself in us: on the other hand, it is also true that the self is not known as it really is, so long as it is conceived as an abstract identity, (as we are disposed at first to conceive it,) but only when it is taken as a principle of unity in difference, a principle which cannot realise itself without going beyond itself; in short, a principle which is essentially synthetic. In this way, the 'transcendental reflexion' lifts us above dualism on both sides, and leads us to regard the consciousness of the object and the consciousness of the self as issuing in their difference from a common source, and pointing in their final form to a unity in which that difference is resolved.

The dualism of Descartes. It is inconsistent with his own view of mind and matter.

How far does Kant's transcendental reflexion answer to this description? The answer is partly contained in what

has been already said; but some further light may be thrown upon it by considering in what way the opposition and relation of the subjective and the objective consciousness appeared in writers before Kant. Now, it is in the philosophy of Descartes that we have the most simple and naïve transcription of the dualism of object and subject, matter and mind, as it appears in the ordinary consciousness. The subject, one with itself and indivisible, stands on the one side, and the material world in infinite diversity on the other; and there is no room for a mediation except by a *deus ex machina*. Thus the pure unity of the self is just the opposite counterpart of the extended substance, *i.e.*, of a world which is infinitely self-external or divided into *partes extra partes ad infinitum*. But in showing this, Descartes showed also, though he was never aware of the result of his logic, that these opposites imply each other; and that the consciousness which apprehends each in relation to the other, has already potentially transcended their opposition and grasped a unity, in view of which it ceases to be a contradiction, and reduces itself into an opposition of elements which are necessary correlates of each other. From this point of view, the opposition of the consciousness of the object to self-consciousness is, as Kant expresses it, an opposition of 'different branches which spring from one and the same stock.' And we are obliged to think of the unity of self as a principle which is the source of all that difference in the objective world, in opposition yet in relation to which it becomes self-conscious. Hence, the opposition between the conscious self and the external world is not to be regarded, as Descartes regarded it, as an opposition between the intelligence and that which is essentially other than the intelligence, but as an opposition of correlative elements in the intelligible world; and a relation of things as in space is a relation which can exist only for an intelligence, which, therefore, in apprehending such things, is not going beyond itself; for the external object is not external to the self for which it is.

Kant overcomes this dualism, though only so far as relates to phenomena.

Now, in Kant we undoubtedly find the first definite expression of this new idealistic view of things, though in him it is still embarrassed in its expression by elements

derived from an earlier dualism. For Kant, the absolute opposition of the intelligence to a world in space has disappeared. He holds that "space itself with all its phenomena, as ideas, are only in me, and it is impossible that in this space anything should be external to me in a transcendental sense, because space itself is nothing external to our sensibility"; and that, "if anything were in a transcendental sense external to us, it could not be represented or perceived as external in the sense of being in space."[1] Furthermore, he maintains that the consciousness of the object in space, and of the self in contrast with it, does not arise except by the activity of the self, which out of the data of sense constructs for itself the objective world, and in distinction therefrom becomes conscious of itself. At the same time, the activity of the self is always conceived by Kant to have relation to certain affections of its passivity which have to be referred to things in themselves; *i.e.*, to that which is in a transcendental sense, external to the self. "The understanding makes Nature, but does not create it," for it makes it out of a matter passively received. And as little as Descartes, does Kant observe any correlation between the simplicity of the pure ego and the form of space under which its object appears to it. Hence, Kant only changes the old dualism between the extended substance and the mind into a subjective dualism between perception and conception, and ultimately between the given data, together with the forms under which they are received, and the activity of the understanding in regard to these data. Thus the spectre of the old objective dualism reappears in the form of the opposition between the ego in itself that manifests itself in the activity of thought, and the thing in itself which affects it, and so provides material for this activity. Further, according to this view, the ego knows itself in its noumenal reality as little as it knows the object in itself; for, if all that it knows of the object in itself are the affections it receives from it, and if through these it knows only *that* the object as a thing in itself is but not *what* it is, on the other hand, all that it knows of the *ego in itself* is the activities by which it gives to these data

[1] A. 372 *seq.*

the form of experience, and this only enables it to say *that* the ego is but not *what* it is. It cannot, therefore, determine itself any more than it can determine the object as a thing in itself. It knows each only in its relation to the other;—on the objective side, phenomena or the data of sense as determined by the unity of the understanding; and on the subjective side, the unity of the understanding in the acts whereby it determines the data of sense. As has been well shown by Dr. Staudinger,[1] Kant keeps us steadily within the relation "I—object," and will not let us determine either term of the relation in itself. But, nevertheless, he still keeps up the dualism between the terms of this relation and regards them as related, not directly or in themselves, but only as each supplies a factor which is necessary to our experience. Consequently he maintains that we have a consciousness and an assurance of the existence of both, but not a knowledge of either in itself. And the transcendental reflexion which detects the existence of the factors, and shows how the consciousness of the object and of the self in relation to each other arise out of their interaction, is able only to detect this relativity; but not to escape from it.

Kant does not see that the regress upon the unity of knowledge in self-consciousness is also a progress.

After what has been already said, it is not difficult to show the defect of this view. In fact Kant himself has already shown the impossibility of resting in it and the way out of it when he says that the analytic unity of apperception presupposes the synthetic unity: for this cannot mean that the former is simply the abstraction of one element in the latter, but only that self-consciousness is consciousness of objects and something more; or, it is consciousness of objects brought to the knowledge of what it implicitly but really is. Kant's mistake on this point is not altogether to be explained by the fact that self-consciousness appears at first as the consciousness of a self from which the object is excluded. Indeed, he detected the insufficiency of this view when he showed that we are conscious of ourselves as knowing subjects, only as we are conscious of the activity whereby we determine objects as such. But while he thus apprehended that in self-consciousness we make a regress upon the

[1] *Noumena*, p. 10 *seq.*

unity which underlies our determination of objects, and so are able to go back, as it were, to the beginning of that consciousness, and view it in the making, he did not see with equal clearness that this regress is at the same time a progress, by which our whole view of the objects is raised into a higher form. For self-consciousness in this sense is the consciousness of a principle, which is presupposed in our consciousness of the objective world, and without which the data of sense would be for us nothing at all. But it is simply a consciousness of this principle in its abstraction, and the *consciousness* of the principle is not supposed by him to add anything to the *principle* itself. It is simply the analytic recognition that it is what it is. As Spinoza said that desire is simply "appetite with the consciousness of it," as if the consciousness of appetite did not change its character, so Kant says that self-consciousness is simply the consciousness of the unity that is presupposed in all consciousness of objects, and in all the synthesis whereby that consciousness is developed. It is thus an analytic judgment which brings to light "the X, the 'he' or 'it' that thinks"; nor does Kant recognise that in becoming conscious of itself, this "he or it" for the first time becomes, or manifests itself, as an 'I.' "This ego, or he, or it, (the thing) which thinks, means nothing for us except a transcendental subject (=X) which can be known only through the thoughts which are its predicates, and of which, as apart from them, we never can have the smallest conception. Hence, in attempting to fix it as an object, we turn in a continual circle round about it, for we are obliged always to use it in order to make any judgment about it."[1] We are able, therefore, only to mark it out as the subject of all thought and knowledge, but never to determine it as an object; and our return to it is a negative return, in which we abstract from part of the conditions under which objects are known.

The inconsistency of this with Kant's own account of the regress.

To this the conclusive answer is that which is already suggested by Kant's words. For if the unity that underlies experience is revealed as an ego only in its return upon itself in self-consciousness, and if further, it is only as a self-conscious ego that it can be conceived as the

[1] A. 345; B. 403.

source of the categories by which objects are determined, then we must regard that return not merely as a regress by which the constituents of our actual consciousness of objects are discovered, but at the same time as the beginning of a new consciousness of objects. Kant's view implies that in going beyond itself to determine objects the subject is going away from itself; hence there is to him a contradiction in the very conception of its determining or knowing itself as an object. But if it can be conscious of itself in its identity only through the synthesis by which it determines objects, and if, prior to that synthesis, it is not revealed as an ego or self at all, it is absurd to say that the synthesis by which it becomes conscious of itself as an object, at the same time hides it from itself; or, what is the same thing, to say that the only true consciousness we have of the self is as in an analytic judgment, in which we simply recognise the unity presupposed in experience as a simple unity which can have no difference in it.

Consequences of conceiving the movement as both regressive and progressive, analytic and synthetic.

To do justice to the movement of thought from consciousness of objects to self-consciousness, we must regard it at once as a regress and a progress, at once an analytic and a synthetic movement. It is an *analytic regress,* in so far as it brings to light the unity of the self which is presupposed in the consciousness of objects and makes that unity an object to itself, at the same time that it abstracts from all the objects determined by it and in relation to it. It is a *synthetic progress,* in so far as it is only as thus made object to itself that the unity for the first time reveals what it is. Hence, before this process, we call it an ego only by anticipation, *i.e.,* in view of its capacity of thus making itself an object. It is, indeed, just because of this synthetic movement implied in the consciousness of self that in our ordinary consciousness of self we oppose it to all objects. It is this *natural dualism,* as it has been called,—in which the consciousness of the subject and of the object are directly opposed to each other as the consciousness of two separate objects,—which is expressed in its most abstract form in the philosophy of Descartes; and the transcendental reflexion of Kant has its value mainly in bringing us into a new

attitude of thought in which these opposites are brought together. Thus self-consciousness is not isolated from the consciousness of objects, but the latter is seen to be necessarily involved in the former; while at the same time the former is regarded as the consciousness of that principle which is manifested in the latter. But if in this way self-consciousness be recognised as the consciousness of the principle which underlies the consciousness of objects, another step becomes necessary. For on the one hand, a fact seen in the light of its principle is no longer the same fact to us, and thus experience or the consciousness of objects, when carried back to the unity revealed in self-consciousness, must change its character; and on the other hand, the consciousness of self, when regarded as consciousness of the principle of unity in objects, must also change *its* character. It must cease to be regarded as an analytic unity which rests in simple identity with itself, and it must be seen to be a synthetic principle, a principle of difference which goes out of itself to objects in order through them to realise its unity with itself.

How this view throws light on the metaphysical deduction of the categories.

If from this point of view we reconsider Kant's idea of judgment, we get a new light as to his deduction of the categories by means of it. In the judgment of experience, according to Kant, perceptions are brought under *a priori* conceptions, and so at once determined as perceptions of objects and brought into relation to the unity of the self which is the source of these conceptions. In the process of judgment, therefore, the unity of thought is regarded as, so to speak, differentiating itself into the various forms which supply principles of unity for the data of sense, or, putting it in the other way, which enable us to recognise perceptions as perceptions of objects and so to unite them with the "I think." It seems, therefore, that we are entitled to regard judgment as the process in which thought goes out of itself to determine objects, that through such determination it may reach a consciousness of itself. Or, as we might otherwise express it, the judgments by which we determine objects are steps in the synthetic process by which we finally reach the judgment of self-consciousness. Further, according to Kant, the consciousness of self is primarily a consciousness of the

activity whereby we bind all the data of sense into the consciousness of one objective world; or, in other words, it is the return of that consciousness upon its principle, or the revelation in its purest and most abstract form of the unity of thought which underlay all its movements. We may, therefore, conclude that all the categories, as steps in the process of the determination of objects, are involved in the judgment of self-consciousness; or that self-consciousness is a process which includes all the categories, and brings them back to the unity involved in them. Hence, Kant's assertion, that from the analytic judgment all the categories may be derived, points to a truth. Self-consciousness, in its transparent unity-in-difference, contains all the keys by which we are to unlock the secrets of the world: it is the brief abstract of the whole process of knowledge and so of all knowable reality; for, as it is the consciousness of the first unity out of which all the principles of knowledge must be developed, so it is itself the final unity in which they are summed up and brought to completion. Hence, if the synthetic judgment can be taken as the expression of the objective unity of apperception, and the analytic judgment as the expression of the subjective unity which we reach when we become conscious of the principle of the objective unity, it is easy to see that the latter may well afford a "guiding thread" to the discovery of the principles of the former. Unfortunately, Kant's conception of the latter unity as purely analytic destroys the value of his deduction of the categories from it; and, as usual, the want of a perception of the organic nature of knowledge,—as based on a principle of unity which manifests itself in difference and through difference returns to itself,—has to be made up for in a mechanical way, by the reflexion of the unity of thought upon an externally given difference. This method of Kant's, as we have already seen, is exemplified in his metaphysical deduction of the categories from the forms of judgment, regarded in relation to the determination of the manifold of perception. But this vague general reflexion Kant finds to be insufficient, without a definite reference to the manifold as given in our inner sense under the forms of time. Hence, he is

obliged to introduce the schematism of the categories in order to give them a more definite synthetic value, and prepare the way for their application to objects. In the following chapter accordingly we shall consider Kant's attempt there to enrich these empty forms with content, and so to give them objective value; or, in other words, to turn them into principles of unity in difference: and we shall indicate how Kant's failure might be turned into a success by reference to the true view of judgment which that very failure suggests.

How Kant applies the deduction to *our* perceptions as given under the forms of space and time.

Before doing so, however, it is necessary to consider how it is that Kant comes to consider time as the form of inner sense in reference to which the categories must be schematised, in order that they may be applied to objects as perceived in time and space. The answer to this question has already been indicated in the account of the Deduction of the first edition given in the beginning of this chapter; but the statement of this relation becomes more definite in the second edition, where he separates the Deduction into two stages, in the first of which he shows that the categories are necessary to bring *any* given manifold of sense into unity with the "I think" of self-consciousness, by determining it as a connected consciousness of an objective world; while, in the second part, he takes into account that the manifold of our perception is given under the forms of space and time, and shows the same thing with reference to *it*. Here, therefore, he has to explain more fully the relations of inner and outer sense, of which, in the *Aesthetic,* he had declared time and space to be the forms; he has to show how the categories come into action in determining the inner and the outer object in relation to each other, and both in relation to the "I think" of self-consciousness. The circle of experience, in which, through determination of the manifold in the unity of an objective world, we return upon the identity of the self, is now enlarged, by considering the two forms of perception and the difference of inner and outer sense. In the first part, it was argued, that *any* manifold perceived as a mere manifold of impressions of one subject, would give rise to a broken and unconnected consciousness of self, *i.e.*, it would not give rise to a con-

sciousness of self at all. All such manifold must be united into one consciousness of objects in order to make possible the consciousness of one self in relation to it. We have now to apply the same thought with this additional qualification, that our objective consciousness,—so far as it is a consciousness of objects other than ourselves,—is a consciousness of objects in space and time; and that the self of which we are conscious in distinction from these objects is present to us as an object only under conditions of time. We have already seen that, according to Kant, the consciousness of self presupposes the consciousness of objects, which are objects only so far as the manifold of sense is bound together by an unconscious synthesis in images of perception conformably to the categories, and as these images are recognised to conform to the categories as conceptions of objects in general, in applying which, therefore, the intelligence is conscious of its own activity. *Now*, we have to realise that the circle of the elements of our experience is wider than this. For our consciousness of self is a consciousness of the subject as one with itself through all the succession of its inner experience in time, in distinction from, yet in relation to, external objects in space and time. But these objects, again, can be objects for us only as the manifold data of outer sense are taken up by a successive synthesis of the imagination in conformity with the categories, and combined into the images of objects in space and time. We have, therefore, to suppose that the impressions which we receive from without (in a transcendental sense, *i.e.*, from things in themselves) are met by an unconscious activity from within, which combines them into images of perception in conformity with the unity of the self; and the consciousness of self as one with itself in apprehending these images is explicable only as a conscious repetition of the unconscious activity by which they were formed. But this means a consciousness that the products of the unconscious activity are in conformity with the categories, as determining the way in which the manifold of outer sense is taken up under conditions of time and combined into one consciousness.

What is meant by the determination of inner sense according to the categories?

It is then Kant's view that, as in the *pure* consciousness

of self we go back upon the unity which is presupposed in all consciousness of objects, so in the consciousness of the *inner* life of the self in which it maintains its unity through all the succession of its ideas, we go back upon the process by which that unity determines the sensitive subjectivity, through all the succession of its states, in conformity with itself. The consciousness of the self as one with itself is the consciousness of the activity of the subject as remaining identical with itself through all its passivity, that is, through all the succession of its impressions; which implies that these impressions are combined into images in conformity with the categories. When, therefore, we oppose inner to outer experience, we are simply opposing the process whereby outer experience is constructed—the process in which "the sensitive ego is determined by the intellectual ego," so that the affections of the former may be capable of being "received into consciousness"—to the outer experience which is its result. This idea is very clearly expressed in the chapter of the Deduction in which the relation of the consciousness of inner to outer experience is touched upon. "We cannot," Kant declares, "think of a line without in thought drawing it, nor of a circle without in thought describing it: we cannot represent to ourselves the three dimensions of space without setting before our mind's eye three lines drawn from one point at right angles to one another: we cannot think of time itself without drawing a straight line (which is for us the necessary outward representation of time), and, while we draw it, attending merely to the activity of synthesis by which we successively determine the inner sense. Motion, as an act of the subject (not as a determination of the object), implying as it does a synthesis of the manfold in space, when we abstract from it and attend merely to the act whereby we determine the inner sense in its form, produces the conception of succession. The understanding, therefore, does not *find* such a combination of the manfold in inner sense but *produces* it by *affecting* inner sense." Kant then proceeds to speak of the difficulty of conceiving how the self that thinks should be identical with the self that perceives itself, which is, he says, simply the difficulty of conceiving how I could

be an object to myself in inner perception. "But," he goes on, "however difficult it may be to understand this, it may be shown to be the fact, if it be admitted that space is the pure form of external perception. For we are to ourselves objects in time; and though time is not presented to us in external perception, we cannot represent it except under the image of a line drawn in space. Without this image we should not be able to recognise that time is of one dimension, any more than we could determine the duration and relative place in time of our inner perceptions without reference to the changes in outward things. Thus we are obliged to arrange the determinations of inner sense or phenomena in time in the same way in which we arrange the phenomena of external sense in space. If then it is admitted that we know objects of external sense only as we are externally affected, we must also acknowledge that we perceive ourselves through inner sense only as we are affected by ourselves; and therefore that in inner perception we know our own subjectivity only as a phenomenon and not as it is in itself."[1]

Inner experience as = consciousness of the process whereby external objects are determined as such.

From this passage it is evident that, in Kant's view, the consciousness of self as an object of inner sense is primarily a consciousness of that process in which the impressions of outer sense are taken up and combined into images according to the categories: *i.e.*, a consciousness of the activity by which the ego determines its own passivity, or reacts upon its determination from without. But as the first manifestation of this activity is unconscious,—as it is an activity of the imagination which is, so to speak, merged in its passivity, or in the process whereby the affections of that passivity become perceptions,—so the consciousness of it takes the form of a

[1] B. 156; § 24. It must be observed that the development of the view of the relation of outer sense in relation to inner sense, which is here given, belongs to the second edition of Kant's *Critique*. In a subsequent chapter I shall attempt to show more fully that this development is not, as is maintained by Schopenhauer and others, to be regarded as a sort of reaction towards a common-sense dualism, but as an advance towards a more consistent application of the main idea of the transcendental deduction and the elimination of certain psychological elements which at first intruded themselves upon him. In what remains of this chapter I confine myself to the indication of the conflicting lines of thought in Kant, which arise from his regarding the movement of reflection by which the universal principle of experience is discovered as merely a movement of abstraction.

consciousness of the self in distinction from and in relation to an object, or to a world of objects, which it determines.

Kant, though he treats inner experience as more abstract than outer experience, enables us to see that the opposite is the truth.

Now, as we have already seen in considering the earlier part of the Deduction, Kant here gives expression to an important truth as to the real nature of knowledge; but he expresses that truth in a somewhat misleading way, because he regards the regressive process by which inner experience is constituted as a process of abstraction. The consciousness of the self as one with itself in all the succession of its inner experience, is taken as an analytic judgment, in which we *merely* become conscious of the unity in difference which was presupposed in the consciousness of objects, without adding any new elements thereto; just as the pure consciousness of self was taken as an analytic judgment, which added nothing to the unity of the self. In this view, the consciousness of self in time is a consciousness of an inner object which excludes all the determinations that belong to the outer objects as in space; while the consciousness of the outer world as such includes all the content of inner experience and something more. On the other hand, Kant here also provides the means for the correction of his own error, when he maintains that inner experience presupposes outer experience. For if that be the case, then the former cannot be taken as more simple than the latter, but on the contrary, the latter must be taken as containing all that is in the former *plus* an additional reflexion.[1] For in the first place, it is shown that, just as the *consciousness* of the unity of the subject gives a new character to that unity, which may be said even to become for the first time a self or ego when it thus returns upon itself; so, the *consciousness* of the inner succession of our affections, as determined in conformity with the unity of self, is more than the mere fact of such determination. And, in the second place, if, as Kant admits, such consciousness in both cases presupposes the consciousness of objects, it must contain that consciousness as a necessary element in itself, or it must itself be that consciousness and something more. And as

[1] It should, however, always be remembered that, as has been shown above, in an organic development every new element involves a reconstitution in relation to it of all the other elements.

pure self-consciousness includes all the categories by which objects are determined as such and carries them back to their principle, so the consciousness of a self as one with itself through all the changes of its inner experience, must contain all the variety of an outer experience, with the further qualification that such outer experience is at the same time the history of a mind,—a mind whose consciousness of itself is developed by the same process whereby its knowledge of objects is increased.

The error in Kant's view is partly a survival of the great mistake of Berkeley,

Now, a clear apprehension of this truth,—that the regress by which self-consciousness is developed, is at the same time a progress,—will save us from that subjective conception of knowledge which was initiated by Berkeley, and from the illusions of which Kant did not altogether escape. For Berkeley, reflecting on the relativity of the consciousness of the object to the self, maintained that the *percipi* of things is their *esse,* in the sense that the real and only objects of our consciousness are our own "ideas" or sensations, as states of our own subjectivity. He did not see that a reflexion which would resolve our knowledge into the affections of an individual subjectivity, is in contradiction with itself. For the subject which is conscious of its ideas as its own, and refers them to objects, is not the individual sensitive subject as such, but an ego which, as it is conscious of itself only in distinction from, and in relation to, objects, cannot reject the consciousness of objects as unreal. If the object be reduced to a state of the subject, the subject ceases *ipso facto* to be an ego; and a self which knows nothing but its own states is an absurdity, a cross between a sensitive subject which does not know but merely feels, and a self-conscious subject which can be conscious of itself only as it is conscious of objects. If Berkeley had realised this,[1] he would have seen that the true meaning of the reflexion that objects exist only for a subject is, not that objects are reducible to the sensations through which we know them, but that we know no objects except those which are relative to a self, which therefore require to be contemplated in that relation in order that their true nature may be seen. But

[1] Of course there are elements in Berkeley's doctrine, especially in his later doctrine, which may be regarded as anticipations of Kant's view.

this implies, not that the objective consciousness must be reduced to the merely subjective, but that we must retract the abstraction in which we regard it as merely objective, and correct errors into which we fall in so regarding it. Of course, at the same time, we must equally retract the abstraction in which we regard the subject as having a pure inward life of its own, or a consciousness of its ideas as mere states of itself apart from their reference to objects.

which Kant enables us to correct, though he does not altogether escape from it himself.

Now, with Kant we partly escape from this tangle, in so far as the regress upon the unity of the self with itself in all the successions of its ideas is seen to presuppose a consciousness of external objects. But as I have already suggested, Kant did not recognise all that is involved in this dependence of inner upon outer experience. Just as he took the pure consciousness of self to be merely an analytic consciousness of the abstract identity of the ego, without observing that the *consciousness* of that identity changes its character; so he took the consciousness of the unity of the ego with itself in the succession of its inner experiences as merely a consciousness of the determinate succession of its subjective states, without observing that the *consciousness* of such a succession changes the character of the states which form its parts. As in the former case, the mere identity of a sensational subject is changed into an " I " or self, which is its own object in distinction from, yet in relation to, other objects; so in the latter case, the successive sensational states are changed into the connected parts of an intelligible consciousness of the objective world, as it becomes known in time to one self. In other words, we cannot think of the succession of sensations as states of a self; for as parts of the experience of a self, they are no longer its sensational states; and, conversely, the states of a sensitive subject are not parts of the experience of a self. Hence, the transcendental regress cannot be a mere return upon the process whereby the sensational states of a sensitive subject are changed by the activity of an ego into a consciousness of objects; it must be the discovery of what is latent in such a consciousness of objects as belonging to a self. It must, in short, be a reflexion upon the distinction of consciousness from self-consciousness, of outer from inner experience,

which discloses the unity presupposed in that distinction as it exists for the ordinary consciousness. Now, Kant goes so far in this direction as to show that self-consciousness is dependent upon a consciousness of objects, and to explain the latter as the recognition that the unity of perception, which is the result of the unconscious working of the understanding under the name of imagination, corresponds to the unity of conception expressed in the categories. But he falls back into the subjective attitude of Berkeley in so far as he speaks of an ego armed with categories by means of which it has to turn certain data of sense, given to it from without, into a consciousness of objects. Such data, however, as he is immediately obliged to acknowledge, cannot be given to the self-conscious ego as such, which presupposes the consciousness of objects; and to say that they are given to a subject which *ultimately* becomes conscious of itself as an ego when it has determined them in relation to objects, is not to the purpose, for such a subject cannot be conceived as the source of categories by which the object is determined as such. As has already been pointed out, the transition from a sensitive to a knowing and thinking consciousness cannot be explained, as Kant attempts to explain it, by the "determination of the sensitive by the intellectual ego"; [1] for when the intellectual ego appears, the merely sensitive ego has disappeared; and the same process which has turned the sensitive subject into a thinking consciousness, has turned sensation into perception. But this means that we cannot explain the consciousness of the object or of the outer world, through a determination of the subject by itself: *i.e.*, a determination of the supposed passive subject, as affected by the thing in itself, by an active subject which does not yet exist. What we can do in the way of explanation of the objective consciousness is, not to go back upon something more simple, upon a unity of the self and a manifold of the sensations which combine in some way to produce it, but to go forward and to correct our first view of the object as a thing in itself by bringing out its relation to the self: for the object is truly seen only when it is viewed as a factor necessary to the com-

[1] R. I. 501; H. VIII. 531.

pletion of self-consciousness. Thus only does transcendental reflexion enable us to correct our primary ideas of the external object as external to the self, and of the self as conscious of itself in an inner life from which the object is excluded. It makes us regard the external world as not only revealed *to* mind but as coming to self-consciousness *in* it, and the mind as coming to the consciousness of itself only as it goes out of itself to determine objects.

The development of the consciousness of objects cannot be separated from the development of self-consciousness,

It appears, then, that the supposition that inner and outer sense are essentially different, or present different objects to us, really arises from a confusion of the successive states of a sensitive subject with the development of knowledge in a thinking consciousness such as ours. For the fact that our consciousness of the objective world is a growing and changing thing, seems at first to imply that that consciousness is subjective, though it may be continually advancing towards objectivity, *i.e.*, continually approximating to the comprehension of that which exists independently of our knowing it: and this again involves the conception of an object independent of thought, which by successive efforts on our part is brought within its compass. Self-consciousness, therefore, appears as a narrower circle, which gradually takes in matter from without, until finally *its* object becomes identical with the object as it is in itself. When, however, we consider the matter more closely, we begin to see that as within and without, subject and object, are strictly correlative, so the presence or absence of a knowledge of the one cannot be separated from the presence or absence of the knowledge of the other. Nor is the growth of the knowledge of objects a process in which the mind can be said to go *out of* itself, as distinct from the process whereby it goes *into* itself or comes to itself. All ignorance of the object is ignorance of the self, all development of consciousness is also a development of self-consciousness. An object that we may, but do not, know has for its counterpart a potentiality in us of perceptions which we have not realised, a 'faculty which we have never used.' The consciousness of defect in our knowledge of the world is a consciousness of disunion in ourselves; or, what is the same thing, it is a consciousness of union with, and

at the same time of separation from, a perfect intelligence for which the process of development is completed. From this point of view the Leibnizian and the Lockian views of knowledge are necessary complements of each other: for while, on the one hand, nothing new can come to existence for us, except by the same process whereby we acquire a new consciousness of ourselves; yet, on the other hand, in so far as the process is one in which new knowledge of objects and of ourselves is actually acquired, we must regard our knowledge in both aspects of it, and therefore our existence as conscious subjects, as derivative. To say that we know nothing purely *a priori,* but only gradually come to know the world as it reveals itself to us, is another way of describing the same fact, which is expressed when we say that our conscious life is the realisation in us of a perfect intelligence; *i.e.*, of an intelligence which knows all that as self-conscious subjects we have the possibility of knowing, and, therefore, is all that we can become. The history of a self-conscious being is thus in one sense a time-process, in so far as in time he advances from knowledge to greater knowledge: but in another sense it is not in time, in so far as the consciousness it implies remains identical with itself in all its acquisitions, and can make no acquisition of any knowledge of other objects, except that which gives it a deeper understanding of itself and satisfies a need present to it from the first and involved in its ideal of knowledge.

though logically self-consciousness is posterior.

The only modification which we can make in this statement of the correlativity of self and not-self, of inner and outer, is one which is just the reverse of that suggested by Berkeley and Kant; viz., that in self-consciousness we have a movement of thought which is logically posterior to the consciousness of objects, in inner experience a movement which is logically posterior to outer experience. It is, indeed, only in this movement of return upon itself that the object gets its distinct qualification as an object; it is only in contrast with inner experience that outer experience is determined as such, and therefore the statement just made remains correct. Still, it is necessary to call attention to the fact that self-consciousness is logically posterior to the consciousness of objects

and includes it, in order to make way for the transcendental reflexion, which sees in the former at once the principle presupposed in the latter and the goal to which it tends. The final interpretation of the world must be idealistic or speculative; it must correct, not only the materialism which springs out of our natural abstraction from the subject, but also the dualism which treats subject and object as co-equal factors, by showing that the correlativity of the object and subject is a correlativity for the subject. Thus, it must "raise consciousness to the form of self-consciousness" and show outer experience to be an element in inner experience; or, what is the same thing in other words, it must explain the world as the self-manifestation of a spiritual principle, which, therefore, must be a manifestation not only to, but in, spiritual or self-conscious beings.

Summary of the first part of the Deduction.

Taking this view of the process of knowledge, we may now sum up the result of the transcendental Deduction and show its relation to the parts of the *Analytic* for which it prepares the way, especially for the discussion of the Schematism and the Principles of Pure Understanding. The transcendental Deduction is intended to prove that a list of categories, which has been based upon the logical analysis of the judgment, has objective application; because it contains the conceptions, without the application of which to the data of sense there would be for us no experience, and hence no objects of experience. In order to show this, it calls attention to the fact that objects of experience are objects for a self. But the manifold data of sense can be brought into relation to the 'I think,' only in so far as they are synthetically combined into one consciousness according to certain general principles, and in so far as they are recognised as so combined. Hence the necessity for an imaginative synthesis of the manifold in perception, and for a recognition of this synthesis as conforming to certain *a priori* principles. But as such recognition is involved in every act of judgment in which we determine an object, the conceptions involved in the act of judgment are those by which the unity of objective consciousness is realised, and realised in such a way as to make it possible that the consciousness

of objects may be united with the consciousness of self. The result then is that we are obliged to regard the whole of our intellectual life as a process to self-consciousness—a kind of circular movement by which the mind goes out of itself to determine objects, in order that through these it may come to a consciousness of itself. The possibility of self-consciousness is the ultimate term to which the question of the possibility of experience points; for the question of knowledge is the question how an object can exist *for me*, or be united with the 'I think.'

Its main defect lies in the conception of the unity of self-consciousness as analytic.

Now, the main defect which we have discovered in this reasoning of Kant was that, while he spoke of judgment as essentially that determination of objects through which they are at the same time brought into relation to the self, and while it was just for this reason that he regarded the "functions of unity" in judgment as supplying the categories by which objects as such are determined, he yet based his list of the categories upon a different view of judgment as the expression of the analytic, and therefore the merely subjective, unity of consciousness. To trace back this defect to its source, we needed only to observe how Kant regarded the unity of self-consciousness, the judgment 'I am I,' as analytic; for this necessarily involved that the categories, as 'species of apperception,' *i.e.*, as aspects of the unity of consciousness with itself in all its apprehension of objects, cannot be synthetic (= unities of differences); or at least that they cannot be synthetic in their own right, but only, if at all, in virtue of a relation into which they are brought to an externally given difference. We have seen, however, that Kant, in effect, refutes himself when he points out that, except in relation to the synthetic unity of experience, the analytic unity of self-consciousness does not exist at all. Self-consciousness is, in fact, the synthetic unity returning to its principle. Hence it is quite true that the so-called analytic judgment of self-consciousness reveals the principle of all objective synthesis; but this is because it is not really an analytic judgment, but rather a judgment in which the difference has become transparent. We thus reach the idea of a metaphysical Deduction of the categories, which would be more satisfactory than that of

Kant, and which would account both for the successive steps in the process of knowledge and for the ideal of knowledge to which it points as its culmination.[1]

The same error appears in the second part in the conception of inner, as more abstract than outer, experience.

The second stage of Kant's deduction involves a similar movement of thought. In it Kant brings into view the fact that our experience is an experience of external objects in space and time, and of an object-self which is known under conditions of time; and he seeks to prove the validity of the categories in relation to such an experience. Here, therefore, we have to consider that the determinations of outer sense are taken up into consciousness by a successive synthesis, the elements so taken up being combined according to certain principles into images of external objects under the forms of space and time; while our consciousness of an inner life belonging to the self arises only when we recognise the successive process involved in such synthesis, which is really a process of 'determining the sensitive self in us by the intellectual self.' Kant, therefore, supposes that we are conscious of ourselves as empirical objects, only as we are conscious of the determination of our sensitive subjectivity to that definite successive synthesis of the manifold by which the objective consciousness is produced. The recognition of this fact, therefore, is supposed to enable us to make a transcendental regress upon the development of our experience, and to detect the manner in which the unity of the self, which is expressed in the categories, becomes a principle of determination for an inner sense through its form of time. In other words, it enables us to detect that schematism of the categories in relation to time, by which our experience is mediated. For, as in Kant's view the categories are merely the conceptions of the laws which must control and regulate all finite minds in the formation of images of sensible perception, in so far as these are to be capable of being brought into relation to a self; so the schematised categories are merely the forms of these conceptions which must guide us as men—*i.e.*, as beings whose inner sense is conditioned by time—in combining *our* perceptions with *our* consciousness of self. Now, the

[1] In the two following chapters we shall have to discuss more in detail the possibility and nature of such a deduction.

criticism to be made upon this view of inner experience is quite parallel to that made upon Kant's view of pure self-consciousness. Kant acknowledges the consciousness of the succession of our experiences to be possible, only through the determination of external objects; but yet he supposes the former to be a simple analytic return from the latter, instead of being, as it really is, a synthetic advance to a new qualification of the former by reference to an element which, though present, is at first only latent in it. Hence, here again we find that what Kant really teaches us is to correct our first inadequate view of the objects of outer experience, by showing that outer experience is ultimately to be explained as an element in inner experience. For, as the existence of objects is essentially an existence for a self, so they must ultimately be regarded as factors—real factors, indeed, but still merely factors—in the process of a spiritual life. In this way, it is possible to recognise in Kant's schematism of the categories, and in his justification of the schematised categories as applied to objects of experience, a higher meaning than is at first obvious; and also to see that we can do justice to Kant only when we recognise this. For what Kant really proves is that the categories, so far as they are 'species of apperception,' or expressions of the different *momenta* in the pure consciousness of self, must necessarily be at the same time the guiding principles in all the different stages of our consciousness of a world, the knowledge of which can be completed only when it is brought into the form of self-consciousness, *i.e.*, when the external or material world is recognised as in reality a spiritual world, as the phenomenon of which the spiritual world is the noumenon.

How far did Kant realise the result of his argument?

Such reinterpretation of Kant would be arbitrary, if we attributed to Kant himself a consciousness of the result to which his reasoning points; but without it we cannot possibly do justice to the truth that is in him, and which is ever and anon breaking through the mask of his immediate statements. Without it, *e.g.*, we cannot understand how he should say that the transcendental deduction does not seek to exhibit the genesis of experience, but to "show what is in it," *i.e.*, to bring the ordinary, and also, it may be added, the scientific, consciousness to a clear

understanding of itself. For this means that in our theory of knowledge we cannot go back upon experience, *i.e.*, either upon the ordinary or the scientific consciousness of objects, in the sense of reducing it to something more simple, out of which it was formed: we can only make it more complex by bringing it to self-consciousness, or enabling it to discover in itself latent elements of which it was not wont to take any notice. What Kant did not fully see is that such a view of the true nature of experience cannot stop short at the mere *recognition* in it of elements which were not formerly recognised, and the consequent admission of the imperfect truth of a knowledge in which they were left out of account,—which is what Kant means when he says that our experience is confined to phenomena. It must necessarily lead to a *transformation* of that knowledge in view of those factors in it which were formerly neglected, but are now brought to light. It must be, not merely a regress by which the foundations of our experience are detected, but a progress by which it is reconstituted. It must not merely show that objects, as we know them in the common consciousness and even in science, are not things as they are in themselves; but, in showing us this, it must supply, at the same time, the elements which were wanting to enable us to apprehend these objects in their truth or complete reality.

CHAPTER V.

THE SCHEMATISM OF THE CATEGORIES.

The categories as principles for the determination of all objects in time.

THE Deduction of the Categories is based on the necessity of the combination of all perceptions with the 'I think,' in order to experience or knowledge. For such combination is possible only as perceptions are determined in themselves or in their relations by certain principles, and recognised to be so determined. Only so can they be referred to any object, holding a place in the one world of objects, which, as such, is distinguished from, and related to, one conscious self. Again, these principles were regarded by Kant, as derived from the conceptions, or rather, we might say, the forms of conception, involved in the process of judgment, as that is analysed by formal Logic. As so derived, however, they are pure determinations of analytic thought, determinations of the subject or of the predicate or of their relations in the analytic judgment: hence they require to receive concreteness in relation to time, as the form of inner, and therefore of all, sense, ere they can be applied to any object presented in time. As so "concreted with time," they are supposed to be taken out of the simple tautology of the analytic judgment, and made into principles for the determination of all objects which are given under the forms of time, *i.e.*, of all objects of sense whatever.

The judgment of experience is the subsumption of an image of perception under a schematised category.

As Kant puts the matter, then, the judgment of experience is to be analysed into a conception of a relation of, or in, time, which is got by determining the category in relation to time; and, on the other hand, into a perception or appearance presented to us under conditions of time as the form of inner sense. The judgment is the synthesis

of these two elements, or the subsumption of the latter under the former; and this, as we have seen, is equivalent to the determination of that as an object, which, in the first instance, was merely an appearance of that object for us. The general type of the judgment of experience, therefore, is the assertion that the perception of an object falls under the conception of it; or, if we like so to express it, that the subjective unity of a perception (which, if expressed in a judgment, would be only the assertion that the appearance here before me, *qua* appearance, has certain predicates,) is conformable to a relation, which, as it exists only for thought, is not limited to present perception, but is the determination of something that is objectively true, *i.e.*, true independently of my present consciousness of it. For, so soon as we have realised that we cannot know things in themselves, and that, therefore, 'object' can only mean that which has existence for a conscious self, we must also recognise that objectivity is nothing but universal validity or validity for "consciousness in general." The reference of the perception to the conception in judgment may be expressed as the assertion that the perception is a case of the conception; an assertion which involves that the object which I perceive, has a reality independent of my particular perception, because the relations that define it for me, as it is now perceived, are themselves independent of time. In other words, the pure conceptions determine perceptions as having their elements united in time with each other or with other perceptions, according to certain general types of relation. The proposition, therefore, which predicates the conception of the perception, is synthetic and synthetic *a priori*; for it takes the isolated perception, which, as such, is confined to a moment of time, and so determines it as to draw from it a rule that holds good for all time.

Necessity of the schema to make the category capable of subsuming perceptions.

Now, we have already seen how this should be understood. It is not true if taken to mean that we have conceptions here and perceptions there, prior to the act of judgment, yet each determined as it is in the judgment; and that the act of judgment merely brings the latter under the former. For this would make the act of judgment purely analytic; and it would imply that both

perception and conception were all that they could be, apart from their union in the judgment. But it is true in the sense that it is just in and through the act of judgment, that the perception and the conception get their qualification. Or, to put it otherwise, it is the same act of consciousness whereby the conception is distinguished from, and related to, the perception, which also gives such determination to the latter that it can be recognised as a case of the former, and to the former such determination that it can be recognised as the principle of unity in the latter. Now, this is just the point to which Kant calls our attention, when he introduces the *schema* between conception and perception. The unschematised conception, as derived from the analytic judgment, shrinks into a mere form for possible conceptions; just as the mere perception, as given in sense and unrelated to the unity of conception, shrinks into a mere manifold: but by the interposition of imagination with its schema, Kant seeks to *realise* the conception, and to *idealise* the perception, and so to make them meet in the judgment of experience. The necessity of the conception being schematised before it is applied, corresponds, on the other side, with the necessity of a reproductive synthesis to give rise to the individual image, which, when brought into relation to the schema, is recognised as a case to which it can be applied. But the final qualification of each, whereby they are so distinguished and related, must be regarded as that which is realised in the judgment, rather than as that which is presupposed by it.

Distinction of a schema from an image.

Keeping this in view, and remembering also the opposition and relation of consciousness and self-consciousness with which Kant connects it, we shall be less likely to misunderstand his procedure in the chapter on the Schematism of the Categories, in which, as is his uniform practice, he starts on the level of ordinary psychological or logical distinctions, in order to make his way up to the transcendental theory of knowledge. The idea of a schema, accordingly, is first illustrated by that inchoate activity of imagination which is implied in recognising an object as one of a certain species: for, as this involves the subsuming of a particular under a universal, it implies

that we realise to ourselves the rule of specification for the universal. In thinking such a rule, the general conception is not, indeed, envisaged in an individual object; but the conditions of its envisagement in such an object are realised, in such a way that the particular image of conception can be brought under it. Thus the judgment, as the synthesis of conception and perception, is mediated by an activity which plays between the two; which schematises the conception that it may be applied to the perception, and gathers the data of sense into a definite image, so that they may be brought into relation to the conception.

How it determines the conception.

Now, the schematising, which is the first part of this process, may be generally described as a kind of realisation in relation to space and time of conceptions which, in pure thought, are apprehended without regard to space and time. In a mere conception, we have a simple unity of abstract elements, which must not logically exclude each other, but which otherwise may be what you please. But in the schema we bring such a conception into relation to the conditions of time and space; and these may affect the possibility of the objects conceived in various ways. For, on the one hand, it may be possible, by the aid of the additional conditions introduced into the schema, to combine in one subject different elements which the conception alone would not enable us to bring together; and, on the other hand, what we can combine in the conception we may be incapable of exhibiting as united in the schema. An instance of the former is the idea of change; for, the object that changes being represented as in time, we are able to combine in it contradictory predicates, *i.e.*, as succeeding each other. As an example of the latter, we may take the idea of a triangle, the angles of which are less or more than two right angles; an idea which is not excluded by the law of identity, but by conditions revealed only in the construction of the conception in space.[1]

Schemata of the pure conceptions.

Now, when a conception is generalised from many individual images, there seems to be no difficulty in reversing the process of abstraction, so as to restore to

[1] A. 716; B. 744. Cf. *Dissertation*, § 5.

the abstract idea some of the characteristics of which it has been robbed. But the pure conceptions of the understanding, as Kant maintains, are not produced by abstraction from any perception; and, moreover, as pure conceptions, they are not homogeneous with the perceptions to which they have to be applied. They are pure functions of unity in thought, different determinations of the analytic judgment which expresses only the unity of thought with itself; while the manifold data of sense are combined in relations of space or time,—relations which imply no necessity of connexion in these data, and therefore no objective unity corresponding to the unity of thought. If, however, we can charge the former with difference, so as to make them express universal relations of different elements as in time, then, as time is the necessary form of all perception, perception may be recognised as conformable to conception. And then, moreover, we can go on to argue that, since such recognition is necessary to self-consciousness, it is not only *possible* but *necessary* in the determination of objects, which must be capable of being united with self-consciousness.

The schemata supply what is wanting in Kant's view of the relativity of perception and conception.

It is important here to observe that the Schematism is made necessary simply and solely by Kant's view of self-consciousness. On his view, self-consciousness, though presupposing the consciousness of the objective world, is yet not regarded as containing it in itself. Self-consciousness is an analytic judgment, because it is simply a regress upon the unity which is presupposed in the consciousness of objects. Hence, no special mediation is necessary to explain how the pure unity of thought as expressed in that judgment, should differentiate itself and so bring itself into relation to the data of sense. If Kant had seen that the unity of the self correlates with the difference and manifoldness of the object, he would have had no need of a middle term to bring together factors which cannot be separated. If there is no purely analytic unity of thought with itself, as opposed to its synthetic unity in knowledge, there cannot be any separate forms of thought as a subjective process, apart from the forms by which it determines objects. But Kant, having put the analytic judgment mid-way between the pure self and the deter-

mination of the object, and having thus deprived thought of its synthetic character, in virtue of which it has relation to objects, is obliged to restore the lost synthetic movement by an external reflexion of the forms of thought upon the forms of perception. Thus the categories, understood as the relations implied in pure thought, relations which have no reference to time, became interpreted as relations of what is presented as in time, which maintain themselves irrespective of the change of times. On the other hand, time, as a form of sense, is a form under which we can have presented to us only individual objects as such, in the narrowest limitation to the time in which they are presented. But when we bring them both together in the judgment, which individualises the conception and generalises the perception, we at the same time recognise that what is presented to us here and now, in a particular perception, is an instance corresponding to a relation which holds good at all times; or, what is the same thing, we are conscious that we have before us an object which exists independently of its presentation in this particular case.

Kant's argument, therefore, necessarily leads to an alteration of his premises.

If we thus work out the idea of the unity of the universal and the particular, of conception and perception, in the judgment, we see that Kant's mediation of each moment by the others must necessarily reduce them to relative elements which exist only in this unity. The reciprocity of determination between the two terms, which is thus disclosed, reduces their difference into a difference of correlative elements; and, at the same time, it makes unnecessary the interposition of any middle term to connect them. In this way the apparent circle which is involved in Kant's assertion, that the principles of pure understanding are proved through an experience which they make possible, becomes intelligible; whereas it cannot be made intelligible so long as any of the elements are supposed to have a character independent of their relation to the others. There is, however, great advantage in following Kant in his analytic method of exposition, if only we understand that his conclusion involves the recasting of his premises. For, it is just his merit that he shows us the very process in which, starting from the

ordinary dualism, we reach a higher conception of knowledge.

His view of the connexion of the analytic and the synthetic judgment.

To state this more definitely:—Kant's argument involves the isolation of the act of judgment *ex parte nostra* from the determination of the object, which is just the same act viewed from the other side. As a consequence, he has to look for a medium of qualification, through which the subjective consciousness of combination of ideas (in our *status representativus*) may be determined as a consciousness of the combination of qualities in objects. And this he finds in the idea that pure consciousness, which expresses itself in the analytic judgment, can determine the empirical consciousness through its form, in such a way as to fix the combination of its elements in time by universal rules of relation; and that thus it can give objective reality to such combination, *i.e.*, can determine it as independent of the special time-relations in which these elements are given to the individual subject. In this process, therefore, the predicate, which is the conception, becomes so determined in relation to time, that it can be applied to the subject, which is the perception, in such a way as to fix its constitutive relations for all time.

How Kant leads us to a true view of the relation of perception and conception in the judgment of knowledge.

But, in this way of putting it, Kant seems to take for granted that we have presented to us in time, altogether apart from any synthetic act, a particular phenomenon or 'object of perception,' in which manifold elements are brought together as constituting an individual object, while yet that object is only characterised as an appearance which may never recur again. Now, Kant himself recognises that an individual object as such cannot be presented to us in sensation, but only by means of a synthesis of imagination, which retains the elements that have been given in sense and combines them into one whole; a whole, therefore, in which all the parts are already taken out of their existence as merely successive feelings, and qualified by their relation to each other. If I say that I perceive such an object now, I am saying that I now stand in a relation to something, which is what it is for me irrespective of the time-succession of my sensations. In other words, the object of perception I have before me, is already determined by the conceptions under which,

as it is supposed, it needs to be brought in order to determine it as an object of experience. All that remains to be done, therefore, when we bring together the conception and the perception, is to recognise that the latter is already qualified by that universal relation which is abstractly expressed in the former; to recognise, in short, that "the synthesis of imagination universally expressed *is* the conception of the understanding." It is true that the fact that I have a sensation is included in the conception of the object, which I call a *perceived* object. But the inclusion of this does not make it less a conception; still less does it reduce it to a sensation. If it did, Kant is ready to tell us that such a perception would be for us as good as nothing. Already, therefore, in a perception which can be subsumed under the schematised conception, that qualification by conception must have taken place which the theory supposes the judgment to give by so subsuming it. For, as perceived, the object has already been taken out of the abstract singularity or singleness in time, which belongs to the sensation. And this is what Kant really shows when he points out that objectivity and universal validity for consciousness are the same thing. For if we have once recognised that a sensation has any reference to an object more permanent than itself, (and this is already involved in everything we can call a perception,) we are no longer dealing with that which has individuality in such a sense as to exclude determination by relation to other sensations, or to require that such determination should be brought to it from without. On the other hand, if such determination be excluded from the sensation, it ceases to be an object which we can subsume under a conception. Kant, however, taking his start, as usual, from those very conceptions which it is the result of his argument to transform, seems here to admit that we have an inner sense in which individual objects or images are successively presented to us in time, with a view to their subsumption under the categories, *i.e.*, he speaks as if inner sense, undetermined by the categories, were already perception of a succession of particular facts or objects; while yet, at the same time, he regards those perceptions as having the singleness of mere sensations. Hence, he

supposes them, in the latter character, to *need* the application of the categories to make them objective, and, in the former character, to be *capable* of this application. But if we take it in the former sense, mere perception is already the experience which was supposed to be derived from it by the application of the categories; and if we take it in the latter sense, it is only a series of sensations, which cannot even be conscious of itself as a series, still less as a series of perceptions of particular objects. We can, indeed, vindicate Kant to some extent by referring to what he elsewhere says, to the effect (1) that the synthesis of imagination, by which perception is brought about, is conformable to the categories, and (2) that the consciousness of self in inner experience is possible only in relation to outer experience. But when we make the correction necessitated by these two admissions, there is no longer any need to schematise the conception, with reference to its use as a predicate for perceptions given independently. And what we must substitute is the idea that the perception, in being determined as a perception, *i.e.*, as the consciousness of a present object, has already been brought under a conception. This, indeed, does not affect the truth of the doctrine that knowledge is a judgment in which perception and conception are determined and referred to each other. For, as was sufficiently shown in the last chapter, the synthetic act of knowledge has two aspects or factors: it is at once a synthesis of the manifold according to a conception, and a recognition of the conception as the principle of that synthesis; and this duality in unity is what is involved in calling it a judgment. But the fundamental error of Kant's statement lies in this, that it suggests that we can find the conception complete *here* and the perception complete *there*, prior to the act by which they are fitted together,—a view which leads to the result that the process of so fitting them is either unnecessary or impossible. Really it would be truer to say that judgment is the *differentiation* of conception and perception in order to their *reunion*. For, on the one hand, if we go back beyond the judgment, we arrive at a unity in which the difference of conception and perception has not yet shown itself. And, on the other hand,

the difference of conception and perception, which shows itself in the judgment, is necessary to that identification of the two, which is also implied in the judgment in so far as it determines the latter by the former. The particular and the universal must be separated in order that either may gain that qualification which it has only as referred to the other. If, however, we adopt this view, we must regard the dualistic beginning of Kant,—whether it be in the form of the opposition of the thing in itself to the ego in itself, or in the form of the opposition of the analytic unity of self-consciousness to the manifold of sense, or finally in the form of the opposition of the unity of the schematised conception to the perception of the individual as determined in time and space,—as a mere abstraction, which is made in order to show that these elements cannot be separated. For if, in any way, we begin with a dualism, it is impossible for us to get beyond it except by reducing it from an absolute to a relative dualism; or, in other words, by disclosing a unity which always underlies and is presupposed in the opposition of the two terms, though not consciously present in our first apprehension of it. In other words, the development of knowledge is impossible, unless in each factor all are involved, or unless in the difference of the factors the unity is involved. As a consequence, we are obliged to conceive the judgment, not as a combination of what was previously distinct, but as a separation, in order to a more perfect unity, of elements which were previously undistinguished, and which, even in being distinguished, are never wholly separated. In this way, we may regard it as a process which is at once analytic and synthetic: which produces the difference it overcomes, and which it is on the way to overcome even in the act of producing it. For the unity has begun to emerge, even in that first dualistic consciousness in which the terms are characterised only in opposition to each other.

Real meaning of the assertion that the categories are species of apperception.

In the light of what has been said, we may now proceed to consider the Schematism of Kant, as a translation of pure 'functions of unity' (supposed to be involved in the analytic judgment) into terms of time, *i.e.*, into definite 'conceptions of objects in general,' by which data of sense

given under conditions of time are to be fixed as elements of an objective consciousness which is independent of time. It has been pointed out in a previous chapter that Kant in his metaphysical deduction already qualifies the pure unity of thought with itself by relating it to the manifold: for the addition of the third category in *quantity* and *quality*, (which, as Kant states, involves the two others,) is confessedly due to a consideration of the judgment as relating to objects; and the very ideas of *relation* and *modality*, so far as they go beyond abstract relations of comprehension and extension, are illegitimate additions to a list of categories derived from the analytic judgment.[1] If there is a pure self-assertion of thought, without reference to the manifold of objects, we cannot get the categories from it. On the other hand, if in that self-assertion the relation to the manifold is involved, then the whole conception of thought or judgment which is set before us in formal Logic must be rejected. In truth, what we get by abstraction of the subjective from the objective, of the pure relation of thought to itself from all matter, is, as Kant himself shows, the extinction of all distinction or relation in a bare " X that thinks " and of which we cannot even say that it is an ' I '; since there can be no ' I ' which is not object to itself (so that " I am " = " I am I "), and " the analytic unity of apperception is possible only in relation to the synthetic unity." This being so, the derivation of the categories from the unity of self-consciousness must take another aspect. They must present themselves as different stages in the synthetic process of self-consciousness, the process whereby through the determination of the objects, there is developed in us a consciousness of self as that to which all objects are relative. And this, as we have seen, is involved in the reasoning of the Transcendental Deduction. For, the fundamental conception of the Transcendental Deduction is that all determination of objects is predetermined in relation to the possibility of self-consciousness; or, in other words, that every step in the process whereby the conscious self goes beyond itself to determine objects is a step towards the final movement by which it returns to

Relation of the Kantian and Hegelian Logic.

[1] See above, p. 313.

itself. It is, therefore, no mere confusion of different points of view, but simply a recognition of the ultimate meaning of Kant's thought, when we assert that the principle of the Hegelian Logic lies in germ in the Transcendental Deduction of the Categories. For what Hegel attempts to show is just that the categories by which thought must determine its object, are stages in a process that, beginning with the idea of 'Being,' the simplest of all determinations, is driven on by its own dialectic till it reaches the idea of self-consciousness. In other words, the intelligence, when it once begins to define an object for itself, finds itself launched upon a movement of self-asserting synthesis, in which it cannot stop till it has recognised that the unity of the object with itself involves its unity with all other objects and with the mind that knows it. Hence whatever we begin by saying, we must ultimately say 'mind.' The idea of self-consciousness may be truly said to contain all the categories which the self-conscious subject can apply to any object; or these categories may be regarded simply as different steps in the movement by which thought, through determination of its object, comes to a consciousness of itself.

Steps in Kant's transition from the analytic to the synthetic unity.

Kant, it need not be said, does not so develop his Transcendental Deduction. He was precluded from doing so by his conception that the pure judgment of self-consciousness is merely analytic, instead of being, as it is, the most perfect of synthetic judgments. Hence, he could find in its forms only pale spectres of abstraction, which could not of themselves do duty as categories. When, however, in spite of the conception of these functions of unity in the analytic judgment, Kant still tries to derive the categories from them, simply by considering them as determinations of objects as such, or as principles of unity in a 'manifold in general,' he is already breaking down the division he has established between pure thought in its unity with itself and pure thought in its relation to perception; and he is showing that the analytic unity already contains the synthetic. He proceeds, indeed, in a somewhat mechanical method in his advance toward a recognition of the synthetic movement of thought, rather externally adding one idea to another than showing that

the one cannot exist without the other, or that taken in its abstraction it breaks down into contradiction. What he shows is, not that one element necessarily involves another, but only that it cannot exist without the other, *if* a certain result is to be achieved. Still, after all, the result to be achieved turns out to be simply the unity of the elements through which it is to be achieved; and under the guise of a mechanical combination of independent things, we do not find it difficult to detect the vital or organic connection, which Kant gradually reveals to our eyes. If we follow Kant's process to the last, the externality of his method takes the appearance of a scaffolding, which falls away when it has done its work.

It is in the schematism that the third category in each class comes into existence.

First, then, as we have seen, Kant gets the categories, as 'conceptions of objects in general,' by a reference of the pure functions of unity in analytic judgment to a 'manifold in general.' Then he proceeds farther to schematise these by reference to the form of time, under which *our* manifold is actually given. Then, going on to describe the schematic process, he makes still farther advances in the same direction. Thus in the case of the first two classes of categories, (which alone it can seem plausible to derive from the analytic judgment), it is the third category alone that is schematised; and the third category, as Kant himself tells us, "demands a peculiar act of thought," not involved in the first two categories, an act of thought which, as he elsewhere says, is essentially synthetic. Thus, 'Number' is the schema of Quantity: but Number is a form of the category of *Totality*,[1] which cannot possibly be extracted out of Unity and Plurality; in other words, it is a conception, not of the one or of the many as opposites, but of the one *in* the many. In like manner, Degree is the schema of Quality: but Degree, as treated by Kant, is a form of the category of *Limitation*, which unites Reality and Negation. In truth, on Kant's own showing, the third category in each of these cases does not belong to pure thought as reflected in the analytic judgment at all, but makes its appearance only in that application of pure thought to the form of perception which Kants calls Schematism. This is shown con-

[1] B. 111.

clusively in the chapter of the *Critique* upon the 'Amphiboly of the Reflective Conceptions': for what Kant is there maintaining is that, while unity and plurality, positive reality and negation, are absolutely separated in pure thought and its objects, *i.e.*, in things in themselves,[1] they can be, and indeed necessarily are, brought together in empirical knowledge and *its* objects. In opposing Leibniz, therefore, Kant accuses him not of inaccurate thinking, but simply of treating the objects of our knowledge as if they were objects of pure thought. If pure thought *were* capable of determining objects as Leibniz took it to be, Kant admits that it must necessarily regard unity and plurality, reality and negation, as pairs of absolute opposites which could not be combined or reconciled *in* these objects. Thus, to take first the category of Quantity, the Leibnizian principle of the 'Identity of Indiscernibles' is attacked by Kant, *not* on the ground that it involves an irrational conception of quantity,[2] but on the ground that it involves a confusion of phenomena with things in themselves, *i.e.*, with things as determined by pure thought. Of the latter, Kant holds that the principle *would* be true, which obviously excludes the idea that things in themselves, *i.e.*, things as conceived in pure thought, should be 'numerable *quanta*.' Hence the idea of extended matter as a 'numerable *quantum*' can arise only as we 'generate time' in the apprehension of the elements of perception, *i.e.*, as we distinguish and relate the elements successively apprehended (which may be parts of space, as well as of time, but in both cases involve, according to Kant, a distinction and a synthesis of times in which they are apprehended). Only as we add together elements which are homogeneous units, can

In Quantity Totality appears as *Number*.

[1] Things in themselves, it is presupposed, *would* be the objects of pure thought, if pure thought could have any objects. The dogmatic Metaphysic of Leibniz, as Kant often points out, treats pure thought as capable of determining objects in spite of its analytic character; it turns propositions which are true of mere conceptions into determinations of objects.

[2] Rather it involves the rejection of the idea of Quantity altogether as a 'synthesis of homogeneous units.' If the units cannot be regarded as homogeneous, if they are altogether incommensurable (like Plato's ideal numbers) there can be no quantitative determination of their sum, *i.e.*, there can be no room for the idea of Quantity.

we combine unity and plurality in the conception of a whole number; and the homogeneous units so combined must primarily be times (or spaces). On the other hand, no object can be conceived as existing in time or space, which is one with itself in such a sense that it is not capable of being divided and regarded as a number of units. Thus it is the reflexion of thought upon the forms of perception which makes it possible and necessary that quantity should be represented as number, and so as at once unity and plurality.[1]

In Quality Limitation appears as Degree.

The case as regards the categories of *Reality* and *Negation* is a little more difficult to disentangle, but the result is similar. The analytic Logic rests on the idea that affirmation and negation are absolutely exclusive, *i.e.*, exclusive in such a way that the exclusion does not leave room for any relation between them. This view is accepted by Kant when he attacks Leibniz for his reduction of evil to mere nothingness or absence of good. "When we represent what is real by the pure understanding alone, (as *realitas noumenon*,) we find ourselves obliged to exclude as unthinkable any opposition between realities, *i.e.*, any relation in which they cancel each other's effects, so that $3 - 3 = 0$. Contrariwise, things phenomenally real may conflict with each other, and as united in one subject, they may wholly or partly annihilate each other's effects, as is the case with two moving forces on the same straight line, which push or pull in opposite directions, or a pleasure which holds the balance against a pain."[2] In other words, the conditions of perception, time and space, make possible a union of opposites in one phenomenal object, which would not be possible in an object of pure thought. The chapter on Schematism supplies

[1] There is a certain difficulty in bringing together the two passages on Number in the chapter on the 'Amphiboly' and in that on the 'Schematism.' We have to observe, however, that in the latter chapter Kant is maintaining against Leibniz the *possibility* of a multitude of homogeneous units as objects of experience: while in the former, he is showing the *necessity* that the category of quantity should be schematised as number, with a view to its application to objects of experience. From this necessity it follows, that no object can be presented to us in experience which is not, or does not admit of being, regarded as a multitude of homogeneous units.

[2] A. 264; B. 320.

the complement to this when it maintains that the category of Quality must be schematised as Degree or Intensive Quantity; which is represented as a mean between complete vacuity and absolute fulness, between pure negation and pure position. Thus Kant lays the basis for the doctrine, not only that real opposites *may* be envisaged as existing in objects known under the conditions of space and time, but that objects known under these conditions *must* be envisaged as realities limited by other realities, the affirmation of which therefore is qualified by negation and so determined as *degree* of reality.[1]

Imperfection of the form in which the third category thus appears.

Before going on to consider the other schemata, let us examine what is involved in the view here taken of pure thought in its relation to the forms of sense. It involves, in the first place, that a 'one' which is also a 'many,' and in like manner a 'reality' which includes 'negation,' are *unthinkable* or cannot be regarded as possible determinations of objects, if objects are to be determined by pure thought alone. But, in the second place, both become intelligible as determinations of phenomenal objects, that is, objects in determining which the unity of thought is applied to the manifold of sense. This agrees with the doctrine that in pure self-consciousness, *i.e.*, in the consciousness of the thinking subject of itself as thinking, all difference and negation is excluded. Yet, on the other hand, it is equally Kant's doctrine that it is only in relation to the synthetic unity of the consciousness of the object that the analytic unity of self-consciousness is possible. Hence the necessity for that curious see-saw already noticed in the last chapter. For, if the thinking subject *can* be conscious of itself as an object, *i.e.*, can affirm itself and recognise its unity with itself, only in relation to that which has difference in itself; and if in that relation it *cannot* affirm itself or be conscious of itself *in the pure self-identity of its being*, (seeing that this would involve a removal of all such relation,) it follows that the process of knowledge is necessarily a progress toward a self-consciousness which can never be attained: a progress which is *necessary*, because thought *must* apply

[1] The full explanation of this conception must be reserved for the chapter on the Mathematical principles.

itself to that which is not itself in order to become self-conscious, and *endless*, because in relation to what is not itself, it cannot become conscious of the pure self. As Schelling puts it, the process of experience is a continual "struggle between the incapacity of uniting factors absolutely opposed, on the one side; and the necessity of uniting them, if the identity of self-consciousness is not to be cancelled, on the other."[1] Or it is a process in which the object is alternately taken into, and expelled from, the consciousness of the self, because of the supposed necessity of consciousness of the object to self-consciousness, while yet, as purely analytic, the latter seems to exclude the former.

Contradiction involved in this view of synthesis implied in the third category.

Such a theory of knowledge, however, involves an alternation of two points of view which are never really brought together. It is impossible to conceive that the consciousness of self as *exclusive* of the consciousness of the object, and the consciousness of self as *inclusive* of the consciousness of the object, should be identified. The unity must be regarded as prior to the difference and overreaching it, if through the difference that unity returns upon itself, and so becomes conscious of itself. And if the unity thus returns upon itself through the difference, it cannot but, in its full development, reduce the difference to an element in, or a necessary expression of itself. If this be so, we are obliged to admit a different view both of the relations of pure thought in itself and of its relation to the manifold in space and time, which in knowledge it has to subsume, *i.e.*, of the conceivable in itself and in relation to the perceivable. Instead of saying that for pure thought unity is absolutely opposed to plurality and plurality to unity, we shall be obliged to say that for pure thought the one is nothing except in relation to the many: and instead of saying that for pure thought affirmation is absolutely separated from negation, we shall be obliged to say that *determinatio est negatio*, *i.e.*, that affirmation can be conceived of only in relation to negation. Further, in both cases the relation will not be a relation of things externally combined, but of things each of which exists only through its relation to the other, or, as we may even

[1] Schelling's *Werke*, III. 394.

express it, *is only its relation to the other.* In other words, what really exists is the unity in which each is one element, the one in the many, the reality which returns upon itself through its negation. Hence thought does not require to be drawn out of itself by a shock from something foreign, ere it can differentiate itself, and by synthesis of differences attain consciousness of its own unity. It has the principle of differentiation in itself—*i.e.*, in itself as pure thought, without relation to anything externally given, even to the pure manifold of space and time. On the other hand, if we can conceive thought as coming into any relation to such a manifold, it must be because the consciousness of such manifold is only a further stage in the evolution of itself, and not the application of it to a foreign matter. For the same reason the synthesis of such matter cannot be limited to an external synthesis—as of that which cannot be brought into unity with the form of thought applied to it—but must go on to the recognition by thought of its own unity *in* the matter. We may, indeed, admit that there is a stage in the process of knowledge in which thought deals with the manifold, in space and time, *as if* with a foreign matter, in which it seeks but in which it cannot find itself; and that in this stage only a relative synthesis is possible, *i.e.*, a synthesis of objects with each other *by* thought, which is not their synthesis *with* thought. But this imperfect unity of thought with its object will be possible only in so far as thought does not bring to bear on its objects its own highest categories, *i.e.*, that idea of its own unity with itself which is at the same time the idea of its unity with all that is an object for it.

Returning again to the categories before us, the application of the remarks is obvious. Kant's reasoning practically involves that the category of the one in the many, *i.e.*, of Totality, is possible to us only in the form of Number or Extensive Quantity, which is generated by the schematism of the pure category of Quantity in relation to time. Hence, Totality must for us take the form of Extensive Quantity or Number, *i.e.*, the synthesis of homogeneous units, and the thought of a completed totality, a totality brought back to unity, is a mere idea, which is contradictory as a pure conception, and unrealis-

able in a perception. In like manner, the category of Limitation or Determination can take for us only the imperfect form of the conception of one reality as limited by another, and not that of a being, which is self-limited and self-determined. The third category is, therefore, only an *idea,* except in the form of a synthesis of elements which remain external to each other.

A new problem arises in regard to the categories of Relation.

So far, however, we have been dealing only with the categories of Quantity and Quality. The categories of 'Relation,' which we have next to consider, stand on a somewhat different footing, for they are categories of reflexion. In other words, as Kant puts it, they are categories which go in pairs,[1] substance and accident, cause and effect, etc.: they express a relation of two elements, which are at once necessarily distinguished and necessarily connected. This difference between the categories of Relation and those of Quantity and Quality may seem to be cancelled by what has been said of the Schematism of the two latter; for, as we have just seen, it is Kant's view that in relation to time, unity and plurality, reality and negation, are brought together as correlated factors in the ideas of number and determinate reality (or degree of reality).

How are they possible on Kant's principles?

The difference, however, is twofold: for, in the first place, the categories of Relation involve a more perfect kind of synthesis of opposites than is involved in number and degree, in which the different elements combined are conceived as externally limiting each other; and, in the second place, this synthesis is regarded as already completed in pure thought; for the categories of Relation, already as mere conceptions, express that duality in unity or unity in duality which, as we have seen, the categories of Quality and Quantity gain only by being schematised. On Kant's principles, it is difficult to see how the analytic unity of thought should give rise to any conception of a unity of differences apart from the schematism; and still more difficult to conceive how, even with the aid of the schematism, it should give rise to a *reflective* conception in which the difference is one of correlative elements. For, in the case of the Categories of Quantity and Quality,

[1] B. 110.

it was the schema which was supposed to enable us to bring together opposites which for pure thought were absolutely separated: and, as we have seen, it did not enable us to bring them together as correlates, but only as limiting each other. To allow pure thought to differentiate itself without relation to any manifold, or, when differentiated, to recover its unity with itself by reducing the difference to a difference of elements that essentially imply each other, was for Kant to retract all that he had said of the analytic character of the movement of pure thought. All that can be done to explain this inconsistency is to point out that, as Kant derives the categories from the Judgment, in which, however formally it may be conceived, the unity of thought appears as containing a duality of elements,—a subject and a predicate which have at least a relative difference,—he took this duality for granted. If, however, it be admitted that such a duality of aspects is necessary or even possible for pure thought as such, we must cease to treat the judgment in which pure thought expresses itself as a mere movement by identity, and the synthetic judgment as an external bringing together of elements previously unrelated. We must substitute for both a view of the judgment as a movement to the differentiation of elements, which, only *as* differentiated, can be held together in unity. Kant was not prepared thus to fill up the gulf between the analytic and the synthetic judgment. But he seeks, as it were, to bridge it over, *first* by taking the duality of thought as already given even in the analytic judgment, which enables him to derive from the latter the categories of relation in a somewhat attenuated form; and, *secondly*, by using the schema as a means of turning this analytic duality into a synthetic duality, so that, *e.g.*, reason and consequent become translated into cause and effect.

The peculiar character of the categories of Relation. Their importance in the development of Kant's philosophy.

It appears, then, that the categories of Relation involve a kind of synthesis of conceptions or elements of conception, which, if we hold to the principle of Kant's own treatment of the categories of Quantity and Quality, cannot be brought together except through 'a third something,' to wit, the form of time; and they involve a more perfect synthesis than can be achieved even with the aid of that

form. For, in the reflective synthesis of substance and accident, cause and effect, action and reaction, each term has meaning only in relation to the other, which at the same time it excludes. Here, therefore, we have at once negation and affirmation, unity and difference; for each term is at once negatively and positively related to the other, and the whole thought is of a unity of differences which at once repel and attract each other. If, therefore, it be true that even in attributing to pure thought the origination of the categories of Number and Degree, Kant is giving to it a synthetic movement of which, on the formal view of it accepted by him, it is not capable; still more obvious is the inconsistency of attributing to it the origination of categories of Relation. Accordingly, we find that it was one of these categories, viz., the category of causality, that first gave rise to Kant's doubts in relation to the dogmatic metaphysic of Wolff, to which his invariable objection was that it treated the analytic movement of thought as if it were a synthetic movement, and pretended to get difference out of identity. And Hume's scepticism had such influence upon him, mainly because it suggested the counter problem, how to reduce to identity things given as different. Kant's first problem in 1763, was how conception can 'fertilise itself' or add new matter to its content; and at that time he had no solution to give except that thought must wait on experience, and accept from experience whatever connexions of phenomena it may present, as the presupposition of its own analytic action. But Hume showed this answer to be unsatisfactory, when he maintained that experience can give us only the *post hoc* and not the *propter hoc*, one thing after another and not one thing as necessarily connected with another. Given one thing, how can you get another from it? was the first question of Kant, which forced him to seek in experience for that synthesis which the intelligence seemed unable to explain. Given two different things in succession, how can you establish a necessary relation between them? was the question of Hume,[1] which forced Kant again to look to the intelligence itself for *a priori*

[1] I have, however, pointed out above, p. 187 *seq.*, that Kant sometimes confuses the two points when he is speaking of his relation to Hume.

principles of synthesis, which, it was obvious, could not be given in sense any more than they could be accounted for by the movement of pure thought. Hence arose the double-edged problem of the *Critique,* which is hidden under the ambiguity of the word synthesis: the problem how, on the one hand, by perception we are able to *add* new matter *to* conception, and how, on the other hand, by conception we are able to *connect* the new matter added *with* the old. This double problem is, Kant holds, to be solved by the relation of pure thought to the manifold of sense through its *a priori* forms; for, as he contends, it is in this relation that the unity of thought develops into conceptions, which supply principles of synthesis whereby that manifold may be brought back to the unity of thought. Such a development has been shown to be necessary even in the case of the categories of Quality and Quantity, which are schematised as Number and Degree. But these schemata do not yet explain how the unity of thought should ever suggest the idea of a *necessary connexion* among the elements of the manifold, which was the special form of synthesis attacked by Hume. For Hume took the synthesis of external relation in time and space for granted, as given in experience, and merely raised the question as to the *necessity* of the connexion of things so related, and as to the origin of the very idea of such a necessity. Kant universalises the problem, and asks for the origin of the syntheses of quantity and quality implied in the determination of objects in time and space, as well as of the synthesis of relation; and he further distinguishes the two questions of the *origin* of the conceptions, and of their *application* to the manifold. Now, it is the former question we have been treating of in this chapter; and we have already seen how he attempts to show that through schematism the analytic unity of thought, in the pure conceptions of Quantity and Quality, turns into the synthetic unity of the conceptions of Number and Degree.

Origin of the *necessity* of the relation expressed in these categories.

But then he goes on to contend that, as that unity expresses itself in a judgment in which subject and predicate are analytically and therefore necessarily connected, so the different elements of the manifold brought into relation to the unity must be determined as *necessarily* connected

with each other. Further, he maintains that as the judgment has three forms which may determine the analytic unity of subject and predicate, so the synthetic unity of necessary relation in the elements of the manifold appears in the three forms of substance and accident, cause and effect, and reciprocity, which again, as referred to time, are translated into the three relations of the permanent to the changing, of antecedent to consequent, and of coexistent to coexistent. The difficulty here lies in the assumption that thought without being synthetic should yet develop into an analytic judgment, which again by an external reflexion upon the manifold as given in time, becomes a synthetic judgment, or a conception of elements that are distinguished and at the same time necessarily connected. And this difficulty is heightened by the way in which Kant reaches to the synthetic conceptions of Number and Degree as relative combinations of *momenta* which pure thought cannot combine, but the combination of which is made possible by the ideas of space and time. If, however, we recognise in the so-called analytic judgment of self-consciousness, not the abstraction from all synthesis, but rather the perfect type of synthesis as the return of thought upon its own unity, we shall not find it difficult to see how the intelligence should give rise to the idea of a necessary connexion in all objects in space and time which it brings into relation to that unity. In fact, the determination of objects as standing in qualitative and quantitative relations to each other, and the determination of them as necessarily connected with each other, would seem to be just steps in the process of knowledge by which these objects are brought back to the unity of thought,—a process which can end only in the recognition of the unity of the intelligence with itself as maintaining itself in all its consciousness of objects, and, therefore, of the unity of all objects not only with each other, but with the mind that knows them. Kant's account of knowledge as an act of judgment really involves this. For in the act of judgment we have not, as formal Logic supposes, the mere conception of an object as self-identical, but the determination of it by distinction and relation, and also the recognition that in and through this distinc-

tion there is a unity which maintains itself or returns upon itself; and consequently that the object is ultimately one with the thought that apprehends it—a truth which is partially expressed by Kant himself, when he says that judgment is the expression of the objective unity of apperception.

Peculiarities of the categories of Modality. Impossibility of finding a satisfactory explanation of these on Kantian principles.

This last remark may fairly introduce the consideration of the schematism as applied to the categories of Modality. These categories, according to Kant, express relations, *not* of objects to each other, but of objects to the mind which knows them. Now, it was the principle of the Transcendental Deduction that all our ideas must be capable of being united with the consciousness of self, and that they can be so united only as they are combined into one objective consciousness. Thus, the unity of all objects with the conscious subject goes along with the unity of all objects with each other as elements in one experience. The mind that is to be capable of knowledge must be capable of the double synthesis of objects with each other and with the self for which they are objects; or, to put it otherwise, must be capable of producing by its own activity the categories, or forms of thought, necessary to establish such relations. On the other hand, it seems impossible to explain the existence of such functions of thought, so long as thought is regarded as ruled by the law of identity. How can a consciousness, gifted only with analytic powers, be capable of synthetically combining the objects which it apprehends? Still more,—how can such a consciousness go beyond itself to apprehend objects which are other than itself, so as to bind up the consciousness of them in the one consciousness of itself? Now, we have seen already that Kant was involved in great difficulties in answering the first of these questions, and that his introduction of the categories of relation as necessary categories of thought could not be *justified* so long as thought was taken as purely analytic: (though it might be *explained* by the fact that this analytic thought was yet conceived by Kant as expressing itself in the form of judgment.) For, if such categories are legitimate, then thought does not necessarily determine its object as abstract identity apart from all relation; but, on the

contrary, it necessarily relates the object which it determines to other objects in the very process of determining it: and we can meet Kant's question, "How are we to understand that because one thing is asserted, something different should be also asserted as flowing from it?" with the answer, that we can understand nothing else; or, in other words, that we cannot understand the assertion of a thing from which nothing else should follow. But if this be admitted, the second question is less difficult to answer. If thought is necessarily determination by relation, *i.e.*, if it necessarily goes beyond the object it apprehends, to unite it with other objects, it becomes intelligible how it should go beyond its own bare identity to apprehend objects, and also how it is just by this going beyond itself that it becomes conscious of itself, or returns to itself; so that, in Kant's language, the analytic unity of apperception is dependent on the synthetic unity. For, if thought is essentially and in itself synthetic, we can understand how it maintains its identity in the differences it produces or apprehends, and how through them it becomes conscious of itself.

The Schematism is virtually a retractation of the analytic view of thought.

We have now seen the relation of the different schemata to the categories and the forms of judgment from which they are derived, and we are in a position to review the whole process and understand its meaning. The Schematism is a middle term which is supposed to unite perception and conception with a view to knowledge. Such a middle term is made necessary by Kant's analytic view of pure thought, which requires that the intellectual 'functions of unity' should be "concreted with time," in order that they may be brought into relation with perception. On consideration, however, it appears that the scaffolding which Kant thus erects really hinders us from seeing the nature of the building he is constructing. For what he really gives us is a disguised refutation of the analytic view of thought with which he started. In the first place, thought, taken as a movement by identity, is yet supposed to be essentially judgment, and that in spite of the admission that the analytic unity is possible only through the synthetic. Being taken in the form of judgment, thought already involves the three functions of thesis, antithesis,

and synthesis: *i.e.*, it involves the idea of a unity which through the difference of subject and predicate returns upon itself. In this way, it becomes easy to extract from it a number of categories, each expressing one of the different phases through which thought moves in its affirmation of itself. In the next place, this shadowy differentiation, which Kant is never weary of declaring to be in itself empty of meaning, is, so to speak, substantiated, by reflecting it upon the contents of inner sense through its form of time—a process which would be nugatory, unless we supposed all the categories in their difference from each other as species of apperception to be already derived from pure thought; for all it can possibly explain is a qualification of the pure relations of thought by the externality of time, which, *e.g.*, translates the relation of cause and effect into invariable sequence. In truth, if we held to the idea of thought as pure identity, there would be only one, or at most two, 'functions of unity' to qualify; and the schematic qualification of such functions could not produce a multitude of categories. Further, if thought needed the aid of the idea of time to attain even such an imperfect unity of negative and positive, of unity and plurality, as is implied in the ideas of Number and Degree, we could not suppose it to be capable of developing the categories of Relation and Modality (which involve higher forms of such a unity) either with or without the aid of the idea of time. This, as we have already seen and as will be shown more fully in the sequel, is admitted by Kant himself in regard to the categories of modality, which express the unity of thought with the object from which it yet distinguishes itself. Hence, for him this unity shrinks into an unrealisable idea. But it is equally true of the categories of relation which express the essentially reflective character of thought, a character which it is vain to suppose that it can acquire by reference to time, if it has it not in itself.

It is an unconscious refutation of the abstract ideas of perception and conception with which Kant starts.

We are obliged, therefore, to regard this whole process, in which thought is gifted with new powers by reference to time, as simply indicating the steps by which Kant gets out of the false position in which he was placed by his original view of thought as in itself purely analytic.

It is a refutation of the principles of formal Logic in relation to thought, disguising itself as a correction of that Logic in relation to knowledge; and its ultimate result is to bring into view the antithetic and synthetic movement of intelligence, which formal Logic conceals. The supposed opposition of pure thought to schematised thought is an illusion. It is true that the unity-in-difference of the intelligence in itself is not equivalent to the unity-in-difference of the intelligence and the intelligible world; or, in other words, that pure self-consciousness, or the unity of objective and subjective self, is not the same thing with the unity of self-consciousness as including and presupposing a consciousness of the external world. But Kant's way of taking thought as a bare identity and perception as a bare manifold, or the former as purely universal and the latter as purely particular, and then looking for a middle term to connect them, involves an abstraction, which, if he had strictly adhered to it, would have made such a middle term impossible. On the other hand, when he goes on to substitute for these abstractions, the idea of thought as judgment and as therefore including in itself a whole series of categories, and the idea of perception as the apprehension of individual things as such, the middle term becomes unnecessary; for in *such* thought the universal has already particularised itself, and in such perception the individual is already the particularised universal. The great value of Kant's argument here as elsewhere lies in this, that it refutes the abstract ways of thinking in which it begins. It is an argument which cancels and reconstitutes the imperfect premises from which it starts. Nor is the value of the instruction it gives to us, when viewed in this way, essentially lessened by the fact that Kant himself never quite realised the full bearing of his own work, or the inconsistency of the end of it with the beginning. What Jacobi says of the thing in itself, that without it we cannot get into the *Critique*, and with it we cannot come out of the *Critique*, is true of almost all Kant's provisional conceptions. And to appreciate the real meaning and value of his method is mainly this—to give him due credit for the process by which he leads us to correct our first

notions, while not concealing his imperfect consciousness of what he was doing.

Judgment as involving three *momenta*, which are expressed in three classes of categories.

In the present case, however, there is something more to be said. For, as was suggested in a previous chapter, Kant himself, in his general remarks on the categories, especially in what he says of the relation of the third category in each class to the other two, and again of the relation of the mathematical to the dynamical categories and principles, does much to help us to a better 'metaphysical deduction of the categories' from the idea of judgment, than that which he himself has given. The categories are not, Kant tells us, to be taken as unconnected functions of thought, but as a difference of elements in the system, *as which* the understanding reveals itself in its characteristic act of judgment. Now, judgment, as we have seen, is a process which involves both distinction and relation; we might even say, in Kantian terms, both analysis and synthesis. It is a process in which we can ideally distinguish three stages or movements: first, the thesis, the simple position or assertion of a thing in which it is referred to itself or set before the mind in its self-identity; secondly, the antithesis or determination of the thing by distinction from, and relation to, other things; and lastly, the synthesis or re-integration of the elements thus differentiated and related—a synthetic movement of which we become conscious when we bring into view the unity of thought which underlies all such distinction and relation. Or, to put it otherwise, in judgment the mind posits its object, determines it by relation, and recognises its unity with itself in this determination; or, what is the same thing in another point of view, it recognises the unity of the object with the thought for which it is. Hence, taking judgment as the determination of the real as such, or, in Kantian language, the process whereby "given ideas are brought to the objective unity of apperception," we can trace in it a movement of thought, whereby the real is first determined as if it were a thing in itself, with no necessary relation to anything but itself; then, as a law of relation between phenomena or things which manifest their nature only in their relations; and finally, as a circle of distinguished and related elements,

which, therefore, no longer stand in indifferent opposition to the thought which distinguishes and relates them, but find in it their centre. We may, therefore, define judgment as at once the distinction of objects from, and their relation to each other, and their distinction from, and relation to, the thought for which they are,—a definition which is nearly equivalent to that given by Kant when he speaks of it as a synthesis of the manifold in relation to the unity of the self, and when he points out that the 'is' of the copula is the expression of the objective unity of apperception. In fact, it is just because the 'is' of the copula thus indicates the return of thought into identity with itself through distinction and relation, that we have in the judgment, what we have still more explicitly in the syllogism, the essential unity of thought, by which it determines its object and itself.

Judgment always *involves* all the categories, but it depends upon the predicate which of them is made *explicit*.

Now, to say that thought is judgment, and that judgment is always synthetic, is to say (1) that thought always involves these three movements: and (2) that they can never be separated. In other words, thought, when it becomes fully self-conscious, cannot but recognise in itself these three phases, which it is impossible to separate, yet which it is obliged to distinguish. It is obliged to distinguish them; for its synthetic, necessarily presupposes its thetic, and antithetic, movements: yet it cannot separate them; for each movement is a step in a process not of mere change, but of development, *i.e.*, a process in which each stage potentially contains the others, and cannot be fully expressed except in relation to the others. Looking at it in the former light, and attending only to the necessary *distinction* of the phases of thought, we may forget that we are dealing with the elements which exist only in a process, and thus we may naturally be led to treat the three attitudes of thought as three orders of categories: first, categories of simple position, *i.e.*, categories which determine an object without explicit reference to anything but itself; secondly, categories of reflexion, by which an object is determined as finding its explanation, its essence or principle, in something else than itself; and lastly, categories of ideal unity, by which an object is again referred to itself, but only as it is regarded as a monad

or world of relations which has its ideal centre in itself, or, to put it otherwise, only in so far as it is in unity with the thought for which it is. On the other hand, when we regard these categories as factors or phases in the process of judgment, we have to recognise that they cannot be fixed in isolation from each other, or, in other words, that we cannot understand the categories of simple position and reflexion except in reference to the highest category which is always involved in the unity of the judgment. And the abstraction which hardens itself against this transitional character of the categories and fixes them against each other, must end in reducing them either to tautology or contradiction. As judgment is synthesis, it cannot be fully understood by us except as expressing the unity of thought with itself through all the differences it states, or, in other words, the unity of the object with itself by negation of all its differences from other things and from thought. But while the judgment is this *for us*, or, in other words, while it cannot be fully understood except in this point of view, it is not necessarily this for the individual who judges. For, while judgment always involves, and even expresses, the highest category, it expresses it only abstractly and imperfectly in the 'is' of the copula, which does not attract attention for itself, but is regarded only as a connecting link between the subject and predicate. Nay, even the separation of the 'is' itself is an abstraction which is not often made in actual predication. In the judgment the unity of thought remains undeveloped, and is, so to speak, subdued to the element it works in. The *explicit* meaning of the judgment is determined by the nature of the terms it binds together, and these may or may not furnish a matter which is adequate to the form of judgment. Thus in a judgment in which a simple quality is asserted to belong to a given object ('This rose is red') there is, no doubt, a qualification of that object by negation and relation; for 'determination *is* negation,' and 'qualities are relations in disguise': but the negation is not made explicit or attended to, and the disguise is not thrown off. The judgment, therefore, appears to determine the object only as an isolated unit, which has no *commercium* with any-

(1) Categories of simple *position.*

thing but itself, and to determine it only by a quality which also has no necessary connexion with any other quality. It is thus explicitly nothing more than the reference of a thing to itself apart from all relation to other things. Relation, indeed, cannot be quite excluded, but it appears only in the indifferent form of quantity, in so far as the subject in reference to the predicate is thought of as one of many actual or possible individuals participating in the same quality, and the predicate in reference to the subject as a special degree or quantitatively determined modification of a given quality. But a quantitative relation is, as Kant points out, a relation of homogeneous units which do not require each other, *i.e.*, it is a relation which seems not essentially to belong to the things related. On the other hand, that which is implicit in such judgment, becomes explicit in judgments where the predicate expresses an essential relation of the subject to something else than itself ('This ball is elastic').[1] Here the abstract copula seems to be elevated into an expression of unity in difference, though as yet only an external or reflective unity, *i.e.*, a unity of things which are primarily determined as different. The subject is determined by relation to that which is other than itself, and which yet, as so determined, it presupposes. The act of judgment, therefore, does not, as in the judgment of simple position, appear to be a gratuitous or arbitrary division for our thought of that which is essentially one, but rather to express a negative and relative aspect, which belongs to the object as such. At the same time, if in this way the *difference* of the judgment of Relation is explained, its *unity* seems to break down in contradiction; or the unity of the object with itself which is presupposed, seems to disappear in the relativity asserted of it. It may be added that the thought which apprehends the relativity seems to move backward and forward, between fixed points which it presupposes as given independently. In truth, the form of judgment combines position and negation,

(2) Categories of Relation or Reflexion.

[1] Note that in the *Prolegomena* (§ 19 *note*), Kant denies that judgments of experience can be based on judgments of perception, the predicate of which is a secondary quality. This is equivalent to saying that judgments of experience imply not only the mathematical but the dynamical principles.

unity and difference, in a contradictory way, because the relativity of the predicate negates the self-reference of the object. To make the matter of the judgment adequate to the form, it would be necessary that the predicate should express the conformity of the subject in its differences and relations with the ideal principle of unity implied in it.

(3) Categories of Modality or Ideal Unity.

Hence, Hegel says that the *idea* of judgment is realised only in such judgments as "This man is good," which refers to an ideal principle of humanity as manifesting itself in all the special characteristics and relations of the individual man, and thus giving him the most perfect harmony and unity with himself. In other words, such a predicate alone gives to the copula its full complement of meaning, as expressing the unity of thought with the object which it determines, or, looking at it in the other way, the unity of the particular object with its *own* universal. For the reflective or antithetic movement by which thought determines its object in relation to other objects, is now, as it were, bent back into itself, and reconciled with the immediate reference of the object to itself, which is expressed in judgment of mere thesis or position (*i.e.*, in Kant's judgments of Quality and Quantity). And, in this reinstated unity of the object with itself, is also expressed its unity with the thought for which it is; for such thought no longer presupposes given objects as points between which it moves in apprehending their relations, but the objective difference of the correlated elements or objects is viewed as itself the expression of an underlying ideal unity. The object is now recognised as that in apprehending which thought is conscious of its own unity, or as an object in which thought can find *itself*. To put it in Kant's phrase, the transcendental unity of apperception is in such judgments recognised to be constitutive of the object. The abstraction, so natural to the common consciousness and even to science, by which objects are taken as if they existed for themselves without relation to the subject, is in such judgments expressly annulled in the unity of thought with its object.

When is the *matter* of judgment adequate to its *form?*

This view of judgment may be made a little clearer by a slightly different mode of statement. If we look at judgment as the act in which perceptions are determined

by conceptions, it is obvious that we may make any one of the *a priori* conceptions or of their schemata, or any conception that falls under them, into the predicate of a judgment. This is done by Kant when he lays down in the principles of the pure understanding that all objects of experience have extensive and intensive quantity; that they are determined in their relations to each other in time (and space) by the categories of substance and accident, cause and effect, and reciprocity; and that in relation to the consciousness for which they exist, they have a certain modality (as hypothetically necessary). But, though all such determinations are expressible in judgments, it cannot be said that the judgment has a matter adequate to its form, except when the predicate expresses an idea, which explains at once the distinction and the unity of the elements of thought implied in that form; for only then have we an idea for which the judgment is the *necessary* expression. Now, ideas of quantity and quality do not, as such, explain the *division* of subject and predicate in the judgment; and ideas of relation do not adequately explain the *identity* which the judgment asserts between them through the copula. Hence judgments which have not modal predicates, *i.e.*, judgments which do not express the unity of the object with the thought for which it is, express less than they imply. They are judgments which do not explain their own form as judgments; or they are judgments made by anticipation. Thus when we say that objects of experience are extensive *quanta*, the reference of quantity as a predicate to, and its distinction from, those objects is not explained by their nature as *quanta*. Again, when we say that all objects of experience are necessarily determined as substances which reveal themselves in accidents, or accidents which are referred to substances, we show the reason for a reflexion which passes from one side to the other of this dual existence, but not yet a reason for the *identity* of the two correlatives, each of which refers us to the other. But it is just this identity which is asserted in the judgment. Hence even in asserting such a predicate, the form of judgment goes beyond its matter, or the matter does not contain in itself a reason for this form. From this point of view, therefore, we can

justify Kant's assertion that what judgment expresses is, that the relation of its subject and predicate is determined by the transcendental unity of apperception. For this means that, until we make explicit the relation of the object to the conscious self for which it is, we have not fully or adequately explained what the judgment asserts.[1] In other words, so long as by the predicate the subject of the judgment is referred to itself, as in judgments of quality and quantity; or, so long as it is merely referred to other objects, as in judgments of relation, the judgment does not express all it implies. It expresses all it implies only when by the predicate the subject is referred to an ideal principle, which is regarded as realising itself in the particular existence of the subject and constituting its individuality; for then, the determination of the subject by the ideal principle is a determination of that subject by itself.

How the categories of modality lose their objective value for Kant, and come to be regarded as 'mere ideas.'

Now, it is at once obvious that the distinction which Kant makes between the mathematical and the dynamical categories (those with and those without correlatives) corresponds generally to the distinction between thesis and antithesis, or position and reflexion, which has just been given. "For that distinction rests," as he tells us, "on the fact that the dynamical categories have correlates and the mathematical have not;" or, as he elsewhere puts it, the former express a "synthesis of different elements which are not homogeneous," but which, for that very reason, "require each other," so that the one cannot be posited without the other, while the latter express a "synthesis of different elements which are homogeneous," and which, therefore, "do not require each other."[2] It is true that under the dynamical categories he includes the categories of Modality as well as those of Relation; while, on the principles just stated, the modal categories are rather to be regarded as expressing the conception of ideal or organic unity, the unity of an object with itself in all its difference, or, what is the same thing, the unity of the

[1] I do not, of course, say that it meant all this for Kant.

[2] This is said of the mathematical and dynamical *principles*, but for our present purpose it is not necessary to take note of the distinction of principles from categories. (B. 201.)

object with the thought for which it is. But this directly points to that defect of Kant's theory of knowledge, which has been already characterised, viz., that he does not admit that the mind *can* find its own unity in its object, or bring its object into perfect unity with the thought for which it is. Hence, though he holds that objects must be capable of being brought into relation with the unity of self, as otherwise experience could not exist, he equally holds that as given in sense, they are always externally related to that unity. Thus the unity of the self is the source of all the principles of that synthesis by which alone objects can be determined as such, but yet the consciousness of self is negatively related to the consciousness of objects. This being the case, it would seem inevitable that knowledge itself, as being the relation of the object to the subject, should be brought under the category of reciprocity. Yet, as being their *conscious* relation, it necessarily involves a higher category; for to be conscious of the self and the object in distinction from and relation to each other,—and only so can we be conscious of either,—is to see them from the point of view of a unity which transcends their distinction. This difficulty is partly disguised when the reciprocity in question is taken as a reciprocity prior to knowledge, a reciprocity between the subject in itself and the object in itself—the latter being the ground of the affections that furnish the matter for the activity of the former; but it necessarily reappears as a reciprocity *in* knowledge between perception and conception, consciousness and self-consciousness, unless the latter of each of these pairs be taken to include the former as an element in itself. Now Kant, as we have seen, goes so far in this direction that he makes thought or self-consciousness reach beyond the consciousness of objects, and exercise a spontaneity which is not a mere reaction upon the affections that it receives from without. But he insists that in this unlimited spontaneity, just because it meets with no obstacle which reacts upon it, thought determines no object. It is a free movement, but a free movement *in vacuo,* where there is no atmosphere to sustain the wings of thought, and where therefore no progress is made.[1]

[1] A. 4; B. 8.

The result, therefore, is merely the production of *ideas* of objects, which have no objective value; ideas which are ideas and nothing more. This opposition of thought to knowledge, as transcending it, but not transcending it to any purpose, or only to the purpose of setting up an ideal of knowledge with which our actual knowledge is incommensurable, makes it difficult for Kant to deal with the categories of modality which express the relation of the object, as known to the mind. And we can only express the result he arrives at by saying that that relation is for Kant more than reciprocity, yet less than organic unity: *more* than reciprocity or the relation of independent things, because it is a *conscious* relation; *i.e.*, a relation of factors which are both *in* consciousness; and *less* than organic unity, because the factors in consciousness are supposed to be incapable of being reduced to identity. Kant's classification of the modal categories as one species of dynamical categories, is, therefore, just one indication of his tendency to regard the relation of the mind to its object under the same point of view in which he regards the relation of one object to another; though, of course, the very idea of his Transcendental Deduction involves that the relations of the ego to the object can *not* be brought under the categories by which it determines the relation of objects to each other.

Reasons for regarding them as the only adequate categories of reality.

If, however, we view the consciousness of self as involving not an analytic but a synthetic unity, and as, indeed, the very type of such a unity, we shall be led to correct Kant's view of the categories as derived from it; we shall be led to recognise, not only that, without any schematism or reflexion of the unity of thought upon the manifold, we can derive from it categories both of position and reflexion, of thesis and antithesis, but also that these must be recognised as imperfect categories, *i.e.*, as categories which imply a higher unity than they express. And this cannot mean anything else than that which is shown by Hegel, viz., that the idea of organic or ideal unity necessarily arises, whenever we make clear what is involved in the unity of thought with itself in *any* determination of its objects. Every other category is an imperfect representation of *this* category, or a stage in

its development; and to take any other category as a final explanation, or as the principle of a final explanation, of anything is to fossilise thought at one stage of its movement. Every other category implies something it does not explain, and therefore must break down in contradiction, if it is taken as absolute, *i.e.*, as the ultimate truth of things. For the intelligence cannot rest in its progressive definition or determination of any object, till it finds its own unity in that object.

The schematism may be taken as a step towards the application of the categories.

When we reject the idea that the judgment of self-consciousness is analytic, Kant's schematism of the categories is no longer needed to give them synthetic value. Its value now is that it points to the conditions of the *application* of the categories as principles of knowledge. For, as I have already said, the unity-in-difference of pure self-consciousness in itself is different from the unity-in-difference of self-consciousness and the consciousness of the world of objects in space and time. The categories may, therefore, be regarded as the predicates in the primary judgments of knowledge or experience, by which objects are determined in relation to the self, and so as the judgments that are implied in all other judgments. But this means that the determination of these objects by the categories is presupposed in all other determination of them, though it may not need to be explicitly recognised in such determination. Hence, Kant has no sooner got his categories schematised, and so made available for the determination of objects, than he proceeds to consider the judgments of knowledge from the other side, and to show that the objects of our sensible perceptions as known in space and time must necessarily be subsumed under these categories, in order to be determined *as* objects. Or, to put it in Kant's language, the synthesis of imagination, by which images of perception are formed, must necessarily be conformable to the whole system of the categories, and must be recognised as so conformable, if objects are to be known as such. The discussion of this thesis will form the subject of the following chapters.

CHAPTER VI.

THE SYSTEM OF THE PRINCIPLES OF PURE UNDERSTANDING.

Object of the Deduction of the Principles of Pure Understanding.

THE principles of the pure understanding are the universal judgments in relation to objects of experience which it becomes possible to make, if we are authorised to apply the schematised categories to the data of perception. Here, therefore, Kant starts from the point of view of perception, as in dealing with the schemata he started from the point of view of conception. There he had to consider how the categories, as conceptions of objects in general, could be translated into conceptions of objects in time. Here he has to consider how it is possible actually to apply these conceptions to perceptions. And the general answer given is, that it is possible because it is necessary, *i.e.*, because it is only through the application of these conceptions that perceptions can give rise to experience, in the sense of a knowledge of objects.

Kant's contrast between the principles of thinking and the principles of knowing.

As usual, Kant begins by going back to Logic, and again pointing the antithesis between thinking and knowing. Thinking, as a purely analytic process of judging, is tied down to the law of identity; and its highest principle is that no conception taken as a subject can have a predicate which is its negation, or which is the negative of any element contained in it. This is a principle which has nothing to do with the matter of thought, or with the way in which that matter has come into our minds. It is therefore no positive, but only a negative, criterion of truth; for what is self-consistent is not, therefore, true, though what is true must be self-consistent. Kant points out further that in the statement of this principle, it is not right to introduce a reference to time. We ought not

to say that according to the principle of contradiction no man can be learned and unlearned at the same time; for this would imply a consciousness of the possibility of contradictory predicates *succeeding* each other in one subject, a consciousness which cannot be derived from pure thought without reference to the conditions under which objects are given in time. By the law of pure thought, we can exclude from the subject only the negative of any predicate included in the conception of that subject, as when we say "no learned man is unlearned." So much as to the rule of thinking, but it is quite different as to the rule of knowing; for we know that all objects of perception as such come under conditions of time, and therefore we can apply to them all the principles which arise out of the application of the categories to time, or to matter as given under time-conditions, (and also, if they are outward objects, under space-conditions). In so far, therefore, as the intelligence in relation to time, as the form of inner sense, gives rise to categories which correspond to time-relations, *i.e.*, which are capable of being translated into terms of relations of or in time, in so far we can lay down general principles under which all objects empirically known must come; seeing that, if our perceptions do not come under these principles, they will not "furnish us with knowledge, but only with a rhapsody of impressions which would not fit into a context determined by the laws which a connected consciousness involves, and would not therefore be in harmony with the transcendental and necessary unity of apperception." It is thus "the highest principle of all synthetic judgments that every object stands under the necessary conditions of the synthetic unity of the manifold of perception in a possible experience." In other words, we can lay down general principles which carry us beyond particular perceptions, just in so far as such general principles express the conditions under which objects are known through these perceptions. "In this way *a priori* synthetic judgments are possible, if we bring the formal conditions of perception *a priori,* the synthesis of imagination and the necessary unity of such synthesis in a transcendental apperception, into relation with the possi-

bility of empirical knowledge. For we are entitled to say that the conditions of the *possibility of experience* are conditions also of the *possibility of the objects of experience,* and that the synthetic *a priori* judgments which express those conditions have objective validity."[1]

Relation of the Schematism to the Deduction of the Principles of Pure Understanding.

Of the distinction here made between analysis and synthesis enough has been already said. It is Kant's great error that, failing to apprehend the essential relativity of thought, as implied in the categories of Quantity and Quality and expressed in the categories of Relation, he sharply separates analysis from synthesis, thought that abides with its object from thought that goes beyond it. Hence relativity is supposed to be due only to the reflexion of thought upon the forms or matter of sense; and this finally involves the consequence that the distinction of the relative elements can never be overcome. Holding to this view, thought is conceived as by its unity (inasmuch as that unity takes the form of judgment) supplying forms of synthesis for possible perceptions—which, however, apart from actual perceptions, have no objective validity. In this way the necessary relation of the pure consciousness of self to the consciousness of the world, takes the appearance of the relation of an empty unity, which has, however, a variety of forms, to a blind or unintelligible matter, which, however, is determined by the forms of space and time. At this point we have to bring in Kant's view of imagination, as a blind synthetic activity which is implied in perception, and in virtue of which perception is in pre-established harmony with the conscious activity of conception. But the reason why these two activities are in pre-established harmony is, as we have seen, that it is the same activity which is implied in both, though in the one case it acts blindly and in the other consciously. Hence the relative difference of perception and conception, and at the same time their necessary reference to each other; and hence also the possibility of escaping the dilemma in which we are involved when we represent the principles of the understanding either as already present in perception, (in which case they would be useless) or as not so present (in which case they would be impossible

[1] A. 154, 158; B. 193, 197.

of application). On this enough has been already said. Here we have only to recall the imperfection of Kant's statement of the organic unity of consciousness with self-consciousness, an imperfection which arises from his treating both perception and conception as if they could be determined in themselves, apart from the distinction and relation into which they are brought in the judgment. As so taken, they necessarily tend to lose their meaning, and to shrink into mere abstractions of unity and difference; and this leads to an attempt to mediate externally between the two terms. In this mediation, on the one hand, it is shown how the categories get schematised in relation to time, in order to be applied to objects; and, on the other hand, it is shown that the manifold of perception must be combined into images, which are capable of being brought under the principles of the pure understanding and so determined in relation to objects. The first of the two points we have already discussed, and we have seen that the Schematism conceals, under the appearance of an external determination of the categories in relation to time, the truth that pure thought loses its meaning unless it be taken as a movement of determination —a movement of differentiation and integration, culminating in the transparent unity in difference of self-consciousness, which therefore contains in itself a whole system of categories for the determination of objects. Here we have to deal with the other aspect of the question, that the manifold of perception must be brought together in a synthetic unity which is conformable to the system of categories; since otherwise it cannot be made to yield a consciousness of objects which can be united with the consciousness of self.

Nature of Kant's Deduction as a process of argument which reconstitutes its own premises.

Now, in proving this thesis, Kant speaks in the first instance as if perceptions of objects were presented to us altogether apart from that conscious process in which they are determined by the categories. But the effect of his argument is to show that they are not presented as perceptions of objects except through this very determination. The essential difficulty of following his argument is, however, just this: that the former mode of speech, as it necessarily elevates that element which it isolates into

a *res completa,* seems to give to the perception by itself all that afterwards can come to it from the conception, and to make the subsumption of the former under the latter unnecessary. This characteristic of the proof according to which it, so to speak, transforms and reconstitutes its own premises, is often referred to by Kant, though perhaps he does not keep it so steadily before him as might be desired.

The following passage is one of those in which this "turning movement" of Kant's dialectic is most clearly expressed.

"Reason, taken as a whole, in its merely speculative use, does not contain a single directly synthetic judgment based upon conceptions. For, from Ideas of reason, as we have shown" (*i.e.,* in the *Dialectic*), "we cannot derive any synthetic judgments which have objective validity: and though it is different with the conceptions of the understanding, by aid of which we can establish secure principles for the determination of objects, yet we cannot derive these principles from the conceptions directly, but only indirectly through the reference of these conceptions to something which is quite contingent, namely, *possible experience.* If it be presupposed that something is given as object of possible experience, then these principles can be seen to be apodictically certain; but in themselves by a direct *a priori* process of thought, they cannot be known at all. Thus, it is impossible to prove the proposition, that everything that happens has its cause, directly out of these given conceptions. Hence that principle is no dogma, though in another point of view, viz., when we consider it in reference to the one sphere in which it can possibly be applied, *i.e.,* experience, it can be shown to be apodictically certain. If, therefore, we call it a *principle* [Grundsatz] and not a *dogma* [Lehrsatz], and that in spite of the fact that it requires proof, this title finds its justification in the strange peculiarity attaching to it, viz., that it makes possible the very experience which furnishes the basis for its own proof, and that in such experience it must always be presupposed." [1]

How can experience be basis of a deduction of the principles of its own possibility? Ambiguity in Kant's argument.

The full explanation of this method must be postponed

[1] A. 737; B. 765.

till we reach the Analogies of Experience, for it is in special reference to Hume's criticism of the principle of causality that Kant generally, as in the above passage, explains his own procedure. Here, however, it is necessary to point out the main ambiguity which is apt to trouble us throughout. How, we are apt to say, can experience prove the principle of its own possibility? Does this mean that, if we analyse our particular experience, we find certain principles contained in it? Is it possible that particular experiences should yield principles more general than the experiences from which they were derived? Kant answers, no; our particular experiences cannot directly yield universal principles. They can yield such principles only indirectly, when we regard them "in a certain point of view," *i.e.*, when we consider how it is possible for us to have such particular experiences. So to consider them, is to bring them into relation to the conscious self which has them, and which can have them only if they are capable of being combined with the consciousness of self. This combination, however, is possible only as they are determined by the principles of the pure understanding. It appears, therefore, that, when he says that our particular experiences do not themselves imply the universal principles in question, Kant is speaking of those particular experiences not as they really are, but as they would be if they were not determined by the principles of the pure understanding. Really, as the experience of a conscious self, the perception of the particular is an experience which implies the determination of the particular by the universal; though it does not necessarily imply that the universal as such, in distinction from the particular, has been made the object of thought. It is, indeed, a confusion of these two things, viz., a confusion of the *presence* of the universal principle in our determination of the particulars, with the *explicit consciousness* of the universal principle as such, that most often leads to the denial of the former. But there is no necessary connexion between the two; for, just as, in our ordinary consciousness of objects, we overlook their relation to the conscious self, so also we overlook the determination of the objects by universal principles which is implied in

that relation. Hence, our first view, of objects is abstract and imperfect; because it leaves out of account an important factor, which in reality is always present in our determination of these objects. This, however, does not mean that we really can empty our objective consciousness of all relation to the self, and of the principles involved in such relation, but merely that we can, and do, omit to attend to them. But it is not less true that thought has been at work in the constitution of an intelligible experience, although we may ignore its activity. In this point of view, Kant's deduction of the principles of pure understanding as conditions of possible experience means simply that he calls our attention to the elements presupposed in such an experience. In doing so, however, he shows that our previous experience was not what we had supposed it to be, a consciousness of the particular as given in sense without any determination by the universal. He shows, in fact, that an experience which takes such a view of itself, is imperfectly self-conscious, and that it could not have been even that consciousness of the particular which it knows itself to be, if it had not been more. But this implies that, if we reduce ordinary experience to the level of its own view of itself, we must take away from it much that it seems to have. If it supposes itself to be a bare consciousness of the particular apart from the universal, it has to be pointed out that the bare particular as such is no object at all, but is merely an unrelated something of which nothing can be said. If it supposes itself to be a mere consciousness of the data of sense, it has to be pointed out that the data of sense are sensations and not perceptions. In this way what, regarded from one side, is the process of clothing or investing the sensible particular with determinations which are not seen to belong to it till it is viewed as an object for a conscious subject, regarded from the other side is the unclothing or divesting the same sensible particular of determinations which it has usurped, but to which it had no title, *i.e.*, no title in its own right or except as being such an object. Now, it is this last aspect of the process which Kant seems most often to leave out of view, or at least it is the aspect to which he is less careful of giving

prominence. And it is his omission so to insist upon it that seems to deprive his argument of due weight and to expose him to the dilemma above mentioned. For the moment we regard the perception as having a character of its own, apart from any determination by the conceptions under which it is to be subsumed, we seem to make that subsumption either useless or impossible.

This ambiguity is partly caused by the confusion of the use of those principles in ordinary experience with the *conscious* use of them in science.

We may best explain the defect of Kant's statement by saying that he does not always keep separate and distinct the two things which we have just been distinguishing; the *use* of certain *a priori* principles in common experience, and the *conscious use* of them in science, which presupposes that they have been separated by reflexion from the particulars to which they have been applied, and that they have thus been made objects of special attention. Yet the ground for the distinction is clearly stated by Kant himself. According to the principles of the Transcendental Deduction of the Categories, the pure conceptions may be regarded as supplying the primary predicates in the judgments of experience, predicates which are presupposed in all further determination of its objects. But this, of course, does not mean that in our first consciousness of objects we clearly recognise them as qualified and quantified substances, which in all their changing states are determined by laws of causality and reciprocity. Kant's principles of the pure understanding are not present to the ordinary empirical consciousness, any more than the principles of grammar are present to everyone who can give expression to his ideas in language. The kind of consciousness to which such principles are present in their abstract form, and in which they are deliberately used as guides in the scientific investigation of phenomena, is a result of reflexion. When, therefore, Kant says that "our intelligence is itself a system, but in its pure use in which it operates with mere conceptions, it is only a system of inquiry according to principles of unity for which experience must furnish all the matter,"[1] he is speaking of the pure conceptions as supplying guiding principles for the method of science. And he is contending simply that the consciousness that separates the

[1] A. 738; B. 766.

categories from experience, will find in them and in the conceptions based on them, not means for the discovery of another world of things in themselves, but only principles by which the experience from which they have been abstracted may be tested, corrected, and raised into the form of science. Science, in fact, differs from the ordinary consciousness just in this, that it uses the principles presupposed in experience to transform and reconstitute experience. The ordinary consciousness involves these principles, and uses them constantly to determine and relate its objects, but without ever bringing them distinctly before it as objects of thought, or even becoming aware of their existence as general principles. Locke could easily demonstrate that the child knows nothing of a principle of causality, though it constantly explains particular changes by reference to preceding conditions, and even begins to reject its first explanations as inadequate and to look for others. When, therefore, Kant treats the categories as the primary predicates in the judgments of experience, he does not mean that we actually use such abstract categories as predicates in our first judgments; any more than in saying that all experience of objects implies the conscious identity of the self for which they are objects, he means that in our ordinary experience we think of that identity as the principle which determines objects as such. It is a "transcendental reflexion" which teaches us that apart from the conscious unity of the self, there could be no consciousness of a world of objects; and it is a "transcendental reflexion" equally which teaches us that every judgment of experience is, in Kant's language, determined in relation to all the "functions of unity" which we recognise as the categories. Though holding by the *a priori*, Kant altogether rejects the theory of innate ideas;[1] nor does he ever suppose that in our

[1] See especially R. I. 444; H. VI. 37; where, in answer to Eberhard, Kant contends that all our ideas are acquired, but that there is, in the language of law, an *acquisitio originaria* in the case of the ideas of space and time and the pure conceptions of the understanding: in so far as "the formal ground of the possibility" of these ideas lies in our sensibility and our understanding. But this implies that these ideas must be used in experience before they are reflected on, or made the special objects of attention, and therefore before they are stated in their generality.

first consciousness we have the universal brought before us as a special object of attention, but only that it is presupposed in the consciousness of the particular. Thus, we do not begin with a conception of space in its unity and infinity and then localise objects in it, but in localising objects with reference to each other we presuppose space as one and unlimited. In like manner we do not first predicate of our perceptions those conceptions in virtue of which they become for us perceptions of definite intelligible objects, but we presuppose these predicates in all our particular judgments about objects. Hence, the reflective consciousness, which goes back upon the primary principles for the determination of objects and in them finds the means of correcting our first judgments, is a thing quite different from that consciousness of these principles which is involved in the fact that objects exist for us as such; yet the former consciousness is only the recognition of what is presupposed in the latter; and Kant could fairly say that we find the principle of causality in our experience only because we have put it there in the primary exercise of our intelligence.[1] We must, therefore, recognise that, when Kant is showing the necessity of the determination of perceptions by conceptions with a view to experience, *i.e.*, to that consciousness of objects which relates them to the conscious self, he is not directly justifying the man of science in the use of principles of the understanding; he is justifying an application of these principles which is already implied in the empirical matter with which the man of science deals. Hence, the problem of experience will need a different solution, according as we regard it as referring to the former or to the latter application of the categories. If it be asked what authorises the man of science to apply his principles; what is the suggestion or guiding thread which he can find in experience for such application, Kant's answer must be that the matter of experience, as a consciousness of objects, already involves these principles, and that in using them to put the question to experience, we are only testing experience by its own fundamental constitutive ideas. But if it be asked, what

[1] A. 196; B. 241.

then authorises that first unreflective application of conceptions to perceptions, which is involved in all experience, his answer is to be found in the doctrine of the pre-established harmony of perception and conception, and ultimately in the doctrine of the identity of the principles of unity in both. In fact, as we have seen, the ideal priority of perception to conception is not to be understood as if the perception were present, in the character which it has for the conscious self who determines it by conceptions, before the process of such determination begins. A datum of sense can be a perception, the consciousness of an object, only for the self that thus determines it; and though the consciousness of this determination "may be often very weak, so that we recognise it only in the result and not in the activity itself,"[1] yet without it a consciousness of objects is impossible. Hence, if we trace back experience to its earliest form, we shall still find it to be a consciousness of an objective world which, as such consciousness, is determined by universal principles, principles which reflexion detects to be the categories. But our first synthesis, by means of the categories, by no means implies such reflexion, though the imperfection of the result of our first synthesis gradually awakens it. In this way, the scientific consciousness arises out of the ordinary empirical consciousness, when the mistakes and contradictions of the latter force it to go back upon the principles of its constitution, and so, by definition of these principles, to strike into what Kant calls "the secure path of science." Still, though the correction of ordinary experience by science with its clear consciousness of its own principles, is only a correction of experience by itself, we must be careful to distinguish the sense in which it is said that ordinary experience rests upon these principles, from the sense in which scientific knowledge rests upon them.

Kant's language sometimes betrays this ambiguity.

Now, does Kant always keep this distinction in view? That he saw it, is obvious enough from passages that have already been quoted; but there are other passages in which he seems to lose sight of it. Thus, he recognises that an idea which cannot be united with the "I think"

[1] A. 104.

is for us as good as nothing, and he demands conformity to the unity of self-consciousness, and so to the categories, as the condition without which nothing can enter into the sphere of intelligence; but he does not seem always to recognise that perception, as having entered that sphere, is already determined by conception. He seems to draw a line of distinction between what is *capable* of being united to the "I think," and what *is* so united; as if the former, though an actual perception, were still in the condition in which it would be for a subject that did not think or bring its perceptions under conceptions. And this error leads almost necessarily to another, viz., the error of supposing that the determination of perception by conception comes into play only when the conception, or the principle based upon it, is consciously used, as it is used by the scientific man, as a guiding principle for discovery. It is thus that we may explain how in the *Prolegomena* Kant could speak of judgments of perception, as if perception could apprehend particular facts, or make judgments in relation to particular objects, altogether apart from the determination of sense by conceptions; and as if the latter came in only when the judgment was "viewed as determined" by one of the categories, *i.e.*, when the *a priori* principle involved in the judgment was reflected on. If this is not to be explained by the popular character of the *Prolegomena,* and by its special regressive method,[1] it involves a confusion between that conscious use of the principles of pure understanding, which is necessary if ordinary experience is to be raised to the form of science, and that use of them which is necessary to the constitution of ordinary experience itself, *i.e.*, to any consciousness of objects as such.

Science already involves a transcendental regress which, however, is not carried so far back as Kant's regress.

If we set aside this confusion, it becomes evident that science is distinguished from ordinary experience just by the fact that it has a definite method; and this means that it has made a "transcendental regress" upon the principles that are presupposed in ordinary experience, a regress which is similar in kind to that which Kant himself makes in the *Critique,* though not carried so far. For

[1] Which starts with the principles of science and works backwards to their conditions. Cf., however, what is said above, p. 347 *seq.*

the process of reflexion, which enables us to recognise that the principles of the understanding are presupposed in our ordinary consciousness of objects and events, only needs to be carried a little further to reveal that the unity of the self is presupposed in all our consciousness of the world through these principles. And if it is a legitimate inference from the former regress that these principles may be used to remould our ordinary experience and elevate it to the form of science, it is equally a legitimate inference from the latter that the idea of the unity of the self, as underlying the consciousness of an objective world, may be used to re-interpret that consciousness even in its scientific form, and raise it to the form of philosophy. And this, in fact, is what Kant does when he shows that the objects of experience are phenomena or existences for a self; though he finally destroys the value of this demonstration: first, by maintaining the old dualism in relation to the subject in itself and the thing in itself, and, secondly, by refusing to complete the philosophical transformation of science which is the necessary consequence of the new view of its principle of unity.

Kant's confusion of the transcendental regress with a psychological account of the genesis of experience out of independent factors.

The ultimate explanation of the defect of Kant's statement is one with which we are already familiar, viz., his supposition that the regress by which the fundamental principles of knowledge are discovered, takes us back to subjective data given in sense, and to a subjective process of the determination of these data. Now, as we have seen, no such regress upon the elements out of which objective experience was constituted, is possible. If we attempt to go back to sensation without thought, we extinguish perception as well as conception, *i.e.*, we abstract from the matter determined in an intelligible experience as well as from the form that determines it; for the unity of the sensitive life cannot be said to contain the one any more than the other. On the other hand, if the transcendental regress is a process in which by reflexion we become conscious of the principles involved in an intelligible experience, we are not in it going back upon independent factors out of which experience was constructed, so as to catch these factors in a simpler form than that in which they appear in experience. We are

simply showing that that experience could not be *what* it seems to itself unless it were *more*, and are thus bringing it to recognise factors in itself which it did not formerly recognise. But Kant seems to fluctuate between these two conceptions of the transcendental regress; and while, according to the last mentioned view of it, he recognises that our perceptions are what they are for us through their determination by conceptions, he seems to himself, according to the first-mentioned view of it, to be discussing the process by which perceptions, as mere data of sense, are for the first time brought under determination by conceptions. But, as mere data of sense are not even elements in an intelligible experience, Kant is driven to attribute to them, as the matter to which the pure conceptions have to be applied, a determination which they can have only in a consciousness determined by conceptions, and thus to stultify his own arguments. For when they are thus conceived, they have already the determination which he would prove them to need; and by making this determination explicit, what he does is to show, not how experience is possible, but only how experience is to be raised into the form of science. If, however, we set aside this misunderstanding and take the transcendental deduction in its true sense, its whole purport is to show that common experience *is* more than it knows; and that, therefore, if we take its own view of itself as true, we must strip it of much that it claims, and must, in fact, reduce it to a mere flux of sensation out of which no intelligible consciousness could be made. If we allow it what it "hath," we must give it more; if we admit that it "hath not" more than it supposes, we must take from it even that which it "seemeth to have."

If we take away the principles, we reduce experience to a chaos of sensations: if we reflect on them, we raise experience to the form of science.

It appears, then, that the system of pure conceptions or schematised conceptions which Kant presents to us, is simply a systematic account of the principles of the scientific consciousness as he found it exemplified especially in the works of Newton; and Kant's proof of these principles is that when we regard ordinary experience from the point of view of the self for which it is, we cannot explain it except by aid of the whole system of these principles. On the one hand, therefore, if we remove the

principles, and take ordinary experience as what it is conscious of being, it falls together like a house of cards. And, on the other hand, if we admit the principles, ordinary experience must be remoulded by them, and the world of experience will thus become for us what it is to the scientific consciousness; or, in other words, all particular experiences will be regarded as elements which have to find their place in relation to other experiences according to the scientific idea of the order of nature.

The mathematical and dynamical principles. Necessity of making a further distinction between the Postulates and the Analogies.

The elements of the scientific idea of nature are expressed in the mathematical and dynamical principles. The former include the principles of the *Axioms of perception* and of the *Anticipations of sense-perception*; the latter include the principles of the *Analogies of experience* and the *Postulates of empirical thinking*.[1] If, however, we examine closely Kant's explanations of this classification, we find it admits of simplification. For the Postulates of empirical thought are said not to contain any determination of the objects of experience as such, but only of their relation to our faculties of knowledge. But this relation does not form part of the scientific view of objects at all. Science, like the ordinary consciousness, still abstracts from the relation of objects as such to the mind, and it is only the transcendental regress itself which brings that relation into view. Whether the consideration of this relation does, or, as Kant maintains, does not, bring any new qualifications of the object, we need not at present consider. At any rate it is a qualification with which it is the business of philosophy, and not of science, to deal. When, therefore, Kant says that the mathematical principles exhibit "the conditions of *perception* in view of possible experience," while the dynamical principles exhibit the "conditions of the *existence* of the objects of a possible empirical perception," he does not express his thought precisely. For the question of the existence of objects in the sense of their actuality as distinguished from, yet related to, thought, is a question of modality; and it arises only when we ask whether the objects, which we have hitherto treated as things in themselves, have,

[1] I translate *Anschauung* by "*perception*" and *Wahrnehmung* by "*sense-perception*," wherever there is any danger of confusion.

or have not, an existence independent of, or in any way distinguishable from, our consciousness of them; and how they can have such independence, or be thus distinguished, consistently with their existence being an existence for a thinking self? In other words, Kant has under this head to consider the possibility of the existence, *as objects*, of phenomena which, as phenomena, are essentially *objects for us*. As, however, the answer to this question is, that we can determine objects as existing only so far as we combine their phenomena, with each other in one general context of experience by means of the Analogies, the Analogies also are regarded as principles which condition the *existence* of objects of experience. Immediately, however, the function of the Analogies is only to determine phenomena as essentially related to each other in one context of experience, so that one of them cannot be posited without the others; while the mathematical principles merely determine the quantitative conditions under which one must be added to another, *if* they are so added. As regards each of these determinations, we can ask the transcendental question how the object comes to be so determined *for us*, and in each case the answer must be that it is so determined only because the synthetic process of determination by which the object comes to exist for us, is controlled by certain principles, and that the recognition that it is so controlled is involved even in our simplest consciousness of the object.

The relation of the three classes of principles thus distinguished

Kant treats the three classes of principles which in their combination make up the scientific idea of nature almost as if they were co-ordinate elements of that idea. In so doing he is sufficiently in accord with the idea of science as it was exemplified in the work of Newton and his successors. It has, however, been pointed out in the first chapter of the Introduction, that the transcendental regress in which science begins did not, in the first instance, bring into view the dynamical, but only the mathematical synthesis; and that there was a time in the history of science when the principles of such synthesis were regarded as in themselves a sufficient guide to scientific investigation. As, in our first consciousness of the world, we direct our attention mainly to the external relations of

things as outside of each other in space, and coexistent or successive in time, and pay little or no regard to any deeper reason for such relations or any causal or reciprocal determination which may be implied in them, so the earliest science brings to light only the mathematical or quantitative synthesis by which things are added to each other, and does not reflect on any necessity of their connexion. The transition by which the idea of physical causation has in modern times become the guiding principle of science, was, therefore, an important step in advance, involving, as it did, a new consciousness of the relativity and connexion of the changing phenomena, the succession or coexistence of which could no longer be regarded as ultimate facts, or as sufficiently explained by the mathematical synthesis. Kant recognises this step, in so far as he discovers that the dynamical synthesis is below and beyond the mathematical, and that it is necessary to explain the determination of objects in space and time as such. And he himself shows the way to a still further synthesis, in so far as he makes a transcendental regress upon the unity of the conscious self, as a principle which underlies both the mathematical and the dynamical synthesis; though, as has been said, he uses this principle only to determine the objects of experience as phenomenal.

CHAPTER VII.

THE MATHEMATICAL PRINCIPLES.

Recapitulation of the view already given of the Schemata of Number and Degree.

WE have seen, in the fifth chapter of this Book, in what way Kant was led to schematise the categories of Quantity and Quality, as respectively Number and Degree. Such schematism was necessary because he started from the presupposition that unity and plurality, position and negation, could not be combined in pure thought. He had, indeed, spoken in the metaphysical Deduction of the categories, as if the third category, in which these pairs of opposites were united—the category of Totality in Quantity and of Limitation in Quality,—were in some sense the product of pure thought, and therefore derivable from the analytic judgment. But as he comes closer to the problem, he finds that such categories imply a synthesis, which is possible for us only through the intermediation of the idea of time. It is this idea which enables us to bring together terms which in pure thought start asunder as absolute opposites. On the other hand, though the idea of Time enables us to bring these opposites together, it is only under certain limitations that it does so. It does not enable us finally to reconcile them or resolve them into elements of *one* conception, but only to produce a relative synthesis, a combination in which the elements still repel each other, and so give rise to an infinite series. Accordingly, Totality, as the synthesis of Unity and Plurality, takes the form of Number, *i.e.*, a synthesis of separate units in a whole which is never complete; and Limitation, as the unity of Reality and Negation, takes the form of Degree, *i.e.*,

a synthesis by which different elements of reality, which are negatively related to each other, are combined in a real being, which yet always is *ex parte negatio, i.e.*, always defined by reference to a reality beyond it, and which never reaches a position that excludes negation, and a determination which is self-determination. In fact, the conceptions of Totality and Limitation, as the perfect syntheses of those opposed elements, are now seen to arise out of the contrast between the *analytic* unity of *pure* thought, which is one with itself because in it the opposing elements are not brought together at all, and the *synthetic* unity of *schematised* thought, which contains an unsolved contradiction. These conceptions are really *Ideas*, which are unrealisable by the understanding, either in thought or in knowledge: Ideas which serve to point out the phenomenal character of the objects of knowledge, without enabling us to determine the noumenal reality we oppose to them.

General purport of the Deduction of the Mathematical Principles.

This last statement, however, takes us beyond the point which we have at present reached, viz., the Deduction of the Mathematical Principles, *i.e.*, the justification of the application of the schematised categories of Quality and Quantity as universal predicates of all the objects we know. How are we to prove that all such objects are *extensive quanta*, and again that, as qualitatively determined, they are *intensive quanta*? In making such universal statements, we are obviously going beyond what can be given in particular sensation or perception, and stating certain conditions under which alone such perceptions or sensations can be combined with self-consciousness. Now, the Transcendental Deduction was a proof of the general proposition that nothing can be so combined except in so far as its elements are put together into an image of perception in conformity with *a priori* conceptions, and in so far as the perceptions so constituted are recognised as conforming to such conceptions. The Deduction of each special principle of pure understanding, accordingly, can lie only in the proof that *it* in particular is one of the functions essential to this process, in view of some special characteristic of our experience. In other words, taking the different characteristics which belong to

our experience of objects in time and space, we have to ask how such experience can be *my* experience, *i.e.*, can be united with my consciousness of self. For, while the conceptions of the objects of such experience, taken in abstraction from this unity (*i.e.*, from the fact that they are *known* objects), might not give ground for the assertion of any principle that goes beyond the particular experience itself, it is Kant's contention that, when we correct this abstraction, and observe that they are known objects, or objects for a conscious self, we are obliged to go beyond the particular, and lay down a principle which is absolutely universal, *i.e.*, which holds good for all objects of possible experience.

Deduction of the Principle of the Axioms of Perception.

How are we to apply this view to the principle that *all objects of experience are extensive quanta*? The answer which Kant gives is simply that we can reach the proof of this principle by considering that all such objects are objects of perception, and that, as such, they are apprehended as existing in space and time. Now, the perception of an object as in space and time, as here and now, is possible only in so far as the "here" is determined in relation to other "heres" and the "now" in relation to other "nows." The particular time cannot be taken as a moment cut off from all other times, or the particular place as a point cut off from all other places; in fact, such points and moments are merely limits in the continuity of space and time, while every perceivable space or time is a quantum, exclusive of other spaces and times, but continuous with them. It is a "here," which may be divided into many "heres"; a "now," which may be divided into many "nows"; and, on the other hand, it is necessarily taken as itself included, if we may so express it, in the one great "Here" and "Now" of Space and Time. But how then can a particular space or time be perceived? In the *Aesthetic* the answer was given, that it can be perceived only as a special limitation of Space or Time. Space and Time are thus supposed to be "infinite given wholes," which are received into the passive mind through perception, and in which objects are given as occupying definite places and times. But this answer was merely provisional; for space and time

are not given wholes with reference to which objects could be defined, or *in* which they could be perceived as parts. Even in the *Aesthetic* they are declared to be mere forms of the relations of possible perceptions, a view of them quite inconsistent with the idea that they could be given as complete wholes determined in themselves, apart from any synthetic activity of the mind to which they are presented. And, indeed, if we try to think of them in that way, our mind is driven into an infinite series by the alternation between its effort to represent its object as a whole and the nature of the object represented. "The conception of Totality in this case is nothing more than the idea of the completed synthesis of the parts of space: for, as we cannot get the conception by abstraction from the perception of the whole (a perception which in this case is impossible), we can apprehend it only through the synthesis of the parts up to the completion of the infinite, which we think at least as an *Idea*." [1]

Objects can be known as in space and time only by a synthesis under the schema of Number, and by the consciousness of that schema.

If, however, a particular space and time cannot be perceived without relation to other spaces and times, and indeed to all space and time; and if, further, space and time cannot be given in perception, as infinite individual wholes in which all the parts are, or can be, fixed with reference to the whole, how can any object be known by us as in space and time? Only, it is obvious, in so far as space and time are "generated" for us as perceptions in the same synthetic process in which the mind combines the data of sense into definite images, *i.e.*, into images the elements of which are put together in a definite way. Further, in order that we may have spaces and times before us as objects, the mind must not only thus "generate" space and time, but it must become conscious of the unity of its own synthetic action in this process; *i.e.*, it must become conscious of the principle of relation upon which it has been acting. Now this principle, stated generally, is the conception of a synthesis of homogeneous units, which, as homogeneous, form a continuity in which there is no smallest part and no largest whole. Hence, in regard to all times and spaces, we can lay down the principle that they exist for us as objects only by means

[1] A. 428; B. 456.

of a continuous synthesis of homogeneous units in perception, and also by means of a consciousness on our part of the unity of our thought with itself in such synthesis, as being throughout determined by the conception of extensive quantity. Now, it is this consciousness of the unity of our thought with itself in determining the object which is expressed in the judgment, "This space or time is an extensive quantum." And, as all sensible objects are perceived as in space and time, it follows that what has been said of space and time must be said of all objects of experience. "They cannot be apprehended or received into our empirical consciousness, except by that synthesis of the manifold whereby the ideas of a definite space or time are produced, *i.e.*, by the combination of the homogeneous, and the consciousness of the synthetic unity of its manifold elements (as homogeneous)." [1] Hence, phenomenal objects are all *quanta*, and indeed extensive *quanta*: since, as perceptions in space or time, they must be set before our minds by the same synthesis whereby space and time are determined.

Positive and negative aspect of this deduction.

To do justice to this "deduction," we must observe its double meaning. On the one hand, it demands that we should consider the object in a transcendental point of view, as an object known through perception to a conscious self; and it shows us that, from this point of view, the object has necessarily certain characteristics which do not belong to it, when this its relation to knowledge is abstracted from. On the other hand, it makes us recognise that, when we take away from the object what it has in virtue of this relation, we must deprive it also of everything that at first it seemed to have belonging to it as an object in time and space. In the first part of this argument, we take the object as if it *were* independent of consciousness, and we ask how it can become such an object *for us*. And the answer we get is, that it cannot even be *given* to us in perception as an object in space and time unless the data of sense are bound together in continuous synthesis, as an extensive quantum, *i.e.*, as a many-in-one of homogeneous units: and that, even when

[1] B. 202.

so given, it cannot, so to speak, be *taken* by us, or united with the "I think," unless we become conscious of the unity of thought with itself in this synthesis, *i.e.*, conscious of the object as an extensive quantum. However we may suppose the object to be qualified in itself, synthesis according to the schematised conception, and consciousness of the unity that determines the synthesis, *i.e.*, of the schematised conception itself, are necessary, ere the object can exist *for me* as an object in space or time. But then, (and this is the second turn of the argument) to suppose the object in itself as having any qualification apart from, or prior to, this its determination for us, is an absurdity. For, if we start with the consciousness of the object, as related to the "I think," in the way just described, and ask what would be left of such an object, if we took away from it all that is due to the synthetic process by which it is generated in perception in conformity with the category of extensive quantity, and all that is due to the consciousness of it as determined by that category, the answer must be that without the process of synthesis there could be no perception at all; and that without the consciousness of the unity of thought with itself in that process, *i.e.*, without the consciousness more or less clear of the category, the perception would reduce itself to an image on which no judgment was made, and which, therefore, was no image *of* anything for the perceiving subject. And we must always remember that an image so distinguished from, and related to, the conception which is its principle of unity, is a very different thing from a mere image not so distinguished and related. It is a mistake, as has been repeatedly pointed out, to take the perceptive half of our consciousness and suppose an animal to be gifted with it; for the perception which is the subject of the judgment of knowledge, cannot, *prior* to the judgment, have the form which it gets *in* the judgment. It is this point which Kant seems most often to forget; but if it be forgotten, the judgment at once becomes either unmeaning or impossible; for if the particular be taken to be something apart from the universal, either it will have nothing in virtue of which it is capable of being subsumed under the conception, or if it has, it will have no need of the sub-

The latter is not sufficiently attended to by Kant.

sumption. In the present case, it appears to be a simple analytic judgment to say that objects, since they can be objects for us only as in space and time, are extensive *quanta;* for the analysis of space and time at once supplies us with this predicate. But this is simply because in the "generation" of space and time, we are guided by a principle of which we become aware in the very act by which we determine a particular space or time, or any phenomena in it, as an object. On the other hand, until this consciousness arises,—involving, as it does, the distinction and relation of perception and conception, as particular and universal, subject and predicate, in the judgment,—we have no perception of a space and time such as could supply a subject to be judged about. The synthetic movement is not one in which a ready-made subject and predicate are brought together (in which case we should be obliged to take the judgment as analytic), but one by which they are for the first time distinguished from and referred to each other, and so constituted as a unity in difference, such as finds its full expression in a judgment. A particular object in time or space can be represented as such object, only in so far as the universal principles of synthesis in conformity with which its manifold, as a manifold of space and time, is combined into one image, are separated from and referred to it. On the other hand, its manifold can be determined as the manifold of a particular object in time and space, only in so far as the elements of that manifold are combined with each other in the unity which is thus recognised as conformed to the principle. And hence, also, we see how it is possible, from the determination of particular given spaces and time, to derive rules which hold good for all space and time; for we know them as particular spaces and times, only in recognising a universal principle of determination which holds good for all spaces and times, and of course for all objects determined as in space and time. This principle, therefore, justifies the application of Geometry to all objects of external sense, and of Arithmetic to all objects of sense whatever. For it shows us that the "ostensive" construction of figures which we make in Geometry, as well as the "Symbolical" construction of numbers which

we make in Arithmetic, are identical with the constructions which we are obliged to make in determining particular objects of perception in time and space as objects for us. It is for this reason that Kant entitles this principle the "Principle of the Axioms of Perception."

Imperfection of the determination of objects as extensive quanta.

All phenomenal objects, as present to us in space and time, are thus necessarily determined as extensive *quanta.* It should perhaps be added, to complete Kant's thought, that they are determined *only* as extensive *quanta, i.e.,* that the conception of quantity can be applied to them only according to the schema of number. Hence, as such objects, they are represented as parts of a whole, which yet is no whole, for its synthesis can never be completed; and again, as wholes of parts which yet are not ultimate parts or units, for its division cannot be completed. Hence, the principle that all phenomenal objects are extensive *quanta,* if it is a principle which is *necessary* to the determination of the manifold of the elements of perception as objects for a conscious self, is, at the same time, a principle by which they can never be *adequately* determined for that self. For, in order that they may be so determined, it is necessary, on the one hand, that they should be brought under a unity beyond which there is no further difference, and, on the other hand, that they should be reduced to elements which are indivisible units. While, therefore, Kant insists that all phenomena must be determined by this principle, *if* they are to be known as objects, he, at the same time, has laid the basis for the counter assertion of the *Dialectic,* that all objects, so far as they are known through this principle, are determined as mere phenomena.

Deduction of the principle of the anticipations of sense-perception.

The second mathematical principle is that all objects of experience, as objects corresponding to sensations, have intensive quantity; or, as Kant puts it, that "in all phenomena, the real, which is the object of sensation, has intensive quantity or degree." The meaning of this will be clearer if we keep before us its contrast with the previous principle. Under the principle of extensive quantity, Kant had maintained that, inasmuch as every object of experience is known as an object in time and space, and inasmuch as times and spaces can become objects for us

only by a synthesis in conformity with the category of extensive quantity, and by the recognition of the category of extensive quantity as the principle of unity in such synthesis, we can lay it down as a universal principle that all objects of experience are extensive *quanta*. Now, he goes on to say that objects of experience are not merely spaces and times, though, for the purpose of mathematics, we may regard them as if they were. Time and space are forms of relation between objects the nature of which is not completely expressed in these relations. Now, the question is how such a nature can exist *for us*, and what determinations we are obliged to attach to it as so existing. The first answer naturally would be that the qualitative nature of things is given in sensation, just as their quantitative nature was given in the forms of sense. But as, in the latter case, we had to point out that the forms of sense could not be united with the "I think," so that a particular object might be known by us as an object in space and time, without a synthesis of its manifold, and without a recognition of the unity of thought in that synthesis, so here we have to ask whether there is not necessary a similar synthesis and a similar recognition, in order that the qualitatively determined object may be known as such. Now, the qualitative determination of an object in pure thought would not, as Kant in criticising Leibniz admits, imply any negative determination of it; it would be the absolute affirmation of a reality without respect to any other limiting reality. But in our consciousness of objects through perception, determination is always *ex parte negatio*; it is the assertion of a quality in a thing, not absolutely, but in relation to something which limits that assertion. This, however, is for Kant a consequence of the fact that our determination of objects takes place under the form of time, which is supposed, on the one hand, to make it necessary that the qualitative determination of an object should be by limitation, *i.e.*, by affirmation in relation to negation, and on the other hand, so to condition this determination by limitation that it cannot get beyond a determination in degree or intensive quantity; *i.e.*, an assertion which is *ex parte negatio*, an assertion of a certain degree of reality which

lies between zero and infinity, (infinity being = an assertion that would exclude all negation).[1] Now, sensation cannot of itself furnish us with the qualitative determination of an object; for, even if it be regarded as furnishing the matter for such determination, yet such matter cannot become the consciousness of an object as qualitatively determined, unless, by a continuous synthesis, we determine it as against its negative, and unless we become conscious of the unity of thought with itself in this synthesis, *i.e.*, of the category of intensive quantity as giving unity to it. Hence, while we cannot anticipate any of the special qualities which belong to sensible objects as such, (for this would be to anticipate our special sensations) we can lay down by anticipation the general principle, that all objects of sense can be affirmatively determined by us as having a certain quality, only by a continuous synthesis of affirmation as against negation, and by the recognition of such synthesis as having its unity in the principle of intensive quantity.

Three points to be distinguished in Kant's Deduction.

There is a good deal of obscurity in Kant's explanation of his principle owing to his not fully stating in connexion with it certain aspects of his thought, which are presented elsewhere, particularly in the chapter on the "Amphiboly of the Reflective Conceptions." It will, therefore, be necessary to show more definitely, (1) that Kant conceives of Limitation as a category brought into play only in relation to phenomena as known under conditions of time; (2) that in this relation, Limitation is regarded by him as necessarily taking the form, not of the simple assertion of a quality as opposed to its absolute negation, but of the partial assertion and partial negation of that quality; and this again is the assertion of it as having a certain degree of reality, which is limited by another reality that in relation to it is negative; and lastly (3) that it is only as we determine sensation according to this principle, that it can furnish the material for the determination of objects as qualified.

Position and negation are reciprocally exclusive in pure *thought*, but not in *knowledge* as mediated by perception.

The first of these points was the necessary consequence of ideas which were present to Kant as early as his *Essay towards the Introduction of the Idea of Negative Quantity*

[1] Cf. above, p. 411.

into Philosophy; for, as it will be remembered, the main thought of that essay is the contrast between real and logical opposition. According to the laws of thought, we must treat negation as the mere absence of affirmation; but the negation of any positive quality or state of a thing, requires, or at least may require, a positive ground. It may require to be accounted for as the result of the neutralisation of the ground for one position by the presence of the ground for another.[1] In Kant's critical period this principle is maintained, but is limited to phenomenal reality; and it leads to the following criticism of Leibniz, which with slight verbal alteration, is frequently repeated:—"Leibniz could not see his way to bring in *a priori* perception as an element or factor in his principle of sufficient reason, but reduced that principle to mere *a priori* conception. The consequence of this was, that, like Democritus, who conceived the universe to be made up out of atoms and the void, he reduced all things, in a metaphysical point of view, to compounds of reality and negation, being and not-being; so that no reason could be given for a negation except only the absence of any reason for a positive determination. Hence, out of so-called metaphysical evil in union with metaphysical good, he produced a world of mere light and shadow; nor did he stop to consider that, in order to put a space in shadow, there must be a material body, *i.e.*, something real which prevents the light from penetrating into it. In his view, pain had its reason only in want of pleasure, vice only in the absence of virtuous impulses, and the rest of a material body only in the want of moving force. For, he argued that according to mere conceptions, reality = A cannot be opposed to reality = B, but only to want of reality = O. Nor did he reflect that the same thing does not hold good in perception. Thus in external perception, *i.e.*, under the *a priori* conditions of space, there is possible an opposition of one reality (a moving force) to another, to wit, a moving force in the opposite direction; and in like manner, in internal perception, opposite real motives may be combined in one subject in such a way that *a priori* the result of this conflict of realities may be known to be

[1] Cf. above, p. 116 *seq.*

negation. It is true that in order to see this, Leibniz would have been obliged to introduce the idea of opposite directions, a thing which can be perceived or envisaged, but not represented in mere conception. But as he was not aware of this oversight, he was landed in the absurd and even immoral principle, that all evil, regarded as a reason, is = O, *i.e.*, is a mere limitation or, as the metaphysicians say, merely formal. Hence, his principle of sufficient reason, taken as a mere law of thought, did not help him in the least to get beyond the principle of analytic judgment, *i.e.*, the principle of contradiction, or to widen his knowledge by an *a priori* synthesis." [1]

Hence they are reciprocally exclusive in things in themselves, but in phenomena they even imply each other.

The bearing of this criticism of Leibniz is to show that, in the phenomenal world, an opposition between realities is possible, so that the negation of one may be its neutralisation by another. Kant does not, therefore, dispute Leibniz's view that, according to conceptions, (and therefore in things in themselves as determined by conceptions only), the negative and the positive are absolutely exclusive of each other; but he contends only that in objects as represented under conditions of time and space, it becomes possible to conceive an opposition of realities, and a negation which is the resultant of such opposition. Thus, he does not admit the principle that "determination is negation," or that negation and position cannot be separated, and that the truth of both is to be found in limitation. Still less does he go on to admit a conception of reality as a unity of factors, which are negatively related as excluding each other, yet positively related as each implying the other. Hence, the category of Limitation, in so far as it involves such a unity of affirmation and negation, is for him irrational, and what takes its place is the idea of the determination of an object by an absolute affirmation which excludes all negation. But this remains a mere idea; for the determination of phenomena as objects, (and these are the only objects we can determine) is always by an affirmation which is relative to an opposite limiting affirmation. This, however, involves a step beyond what is stated in the above criticism of Leibniz; for, whereas that criticism showed that in the phenomenal world

[1] R. I. 517; H. VIII. 544.

negation is possible as the determination by each other of opposites which are equally positive, Kant now goes on to assert that it is possible *only* as such determination; and, conversely, that position is possible only in relation to opposite position, *i.e.*, a position which is *ex parte negatio*. In other words, he maintains that a reality cannot exist for us under conditions of time and space, except in so far as we represent it as limited by an opposite reality. For this (as was pointed out before)[1] is what is really meant by saying that reality is schematised for us as degree, and so as standing between zero and absolute reality; *i.e.*, that we are not capable of determining an object positively, except as we at the same time determine it negatively; or our affirmation of it must be at the same time an affirmation of its limit, and so a partial assertion and partial negation of it—an assertion of it as so far real, and so far not real. But this incapacity of ours to affirm any object as absolutely so and so qualified without reference to its negation, is, Kant holds, to be explained by the conditions of time under which we apprehend it, and determine it as an object. For, to say that it is *given* in sensation as so and so qualified explains nothing, unless we can also see how it is determined as so and so qualified *for us*. Now, such determination under conditions of time implies a continuous process, by which we take up and unite together the elements which go to the positive determination of the object as so and so qualified; and this at the same time involves the negative determination of it by exclusion of an opposite qualification. Hence, Kant says that, "the schema of a reality, as the quantity *of* something so far as it fills time, is just this continuous and uniform production of it in time, which we realise when we gradually go down from the sensation which has a certain degree till it vanishes altogether; or gradually rise from negation to the intensity which it has for us." In other words, the determination of an object as so and so qualified is possible, not by the immediate presentation of it in sensation, but only by a synthetic process which, as in time, is continuous and infinitely divisible; a process in which the sensation is represented as filling the moment

This is due to the form of time under which reality is determined as such.

[1] Cf. above, p. 411 *seq.*

of time more and more completely to the exclusion of its negative; and in which we become conscious of the unity of the perception with itself, as thus produced. Our qualitative determination of an object is, therefore, at the same time a determination of it as having a certain degree of its quality, which is above zero, but short of an absolute reality that excludes all other reality. For the absolute affirmation of a quality would involve that it should fill consciousness so as to exclude its negative altogether; and with this exclusion the affirmation itself, which is possible only in relation to its negative, would disappear. When, therefore, we become conscious through sensation of an object as qualitatively this or that, we are necessarily conscious of it in relation to its negative, which divides the sphere of consciousness with it, and which we conceive as varying in inverse ratio with it. And this quantitative variation of quality moves between limits determined by the fact that pure affirmation and pure negation are equally impossible, as neither is possible except in relation to the other. This, however, as we have already seen, does not, in Kant's view, result from any law of pure thought, according to which affirmation and negation are tied together; for in pure thought they would exclude each other. But a sensation, if it is to be the ground for a consciousness of an object as qualified, must be conceived as occupying the moment of time with a certain degree of intensity. And that it may do so, its matter must be "joined with time" by a continuous synthesis in which the quality gains ground against its negation. In other words, we can become conscious of an object as qualified, only as we determine it as so qualified in a synthetic process, which continuously blends the elements of sensation into an intensive unity, and as we become conscious of the unity of thought with itself in this process, a unity of thought which is defined as the category of intensive quantity.

Kant's application of this principle to matter in space.

This view of Kant as to the way in which quality becomes known as against its negation, but as standing in inverse quantitative ratio to it, becomes more explicit in Kant's treatise on the *Metaphysical Rudiments of Physics,* where he applies it to external experience. In

that treatise he attempts to discover what is involved in the determination of matter as occupying space, and he finds that this affirmative determination of it is possible only if we conceive it, at the same time, as standing in relation to other matter to which it is negatively related. In other words, he finds that matter can be conceived only as the subject of two opposite forces of repulsion and attraction, which are both positive, but which are negatively related to each other; for if its parts were conceived as merely attracting each other, it would disappear in a point, (*i.e.*, would lose that self-externality which is one of its essential characteristics,) and if they were conceived as simply repelling each other, it would disappear by diffusion into the infinite; (*i.e.*, it would lose that connexion of the reciprocally exclusive parts which is its other essential characteristic). In both cases, the qualitative nature of matter as occupying space would disappear, and we should be left with empty space, which by itself is no possible object of perception. This view is expressed in the words with which Kant sums up his chapter on the Qualitative Determination of Matter: "If we look back on the course of our argument, we shall see that it first considers the *Real* in space (otherwise called the solid) as filling it by repulsive force; next, it proceeds to consider that force which in reference to the repulsive force, as the proper object of external perception, may be called *Negative*, viz., the attractive force, by which, if it were to act by itself, all space would be penetrated, and the solid would be entirely cancelled; thirdly it takes note of the *Limitation* of the former force by the latter and of the resulting determination of the degree of the filling of space. Thus we have a complete treatment of the *Quality* of Matter under the titles of *Reality*, *Negation*, and *Limitation*, so far as it is required for the purposes of Metaphysical Dynamics." [1]

The union of opposites as mediated by space and time.

In this passage, Kant transfers to the determination of objects in space what he had before said in relation to the determination of objects as presented to us in time. Determination is by limitation; but the possibility and the necessity of this is regarded as arising, not from anything

[1] R. V. 378; H. IV. 416.

in the nature of thought by which positive and negative are bound together, but from the fact that all objects are regarded as known under the conditions of space and time. Space makes opposite directions possible; nay, it makes it impossible to determine any direction of movement, except by relation to that which has an opposite direction of movement,—which of course involves that it is impossible absolutely to determine anything as in a state of rest or of movement. And if anything be represented as occupying space, it must occupy it by a repulsive force which can be conceived only as exerted against an attractive force that limits it. In like manner, time makes it possible to conceive of the growth of quality through an infinite number of degrees of intensity, in which there is no absolutely lowest or absolutely highest point: nay, we can represent such a quality as a determination of an object only in so far as we conceive it as produced by a synthesis, in which we may either say that it grows up for us from nothing by continuous additions, or that, by such additions, it continually encroaches upon, and diminishes, its negative. In this way, it becomes possible to represent in perception a unity of opposites, which for pure thought is impossible. Nay, it becomes *necessary* to represent such a unity, as the condition under which alone objects can be determined for us as qualified objects in space and time.

Difficulty in combining Kant's different statements as to Limitation and Degree.

In the argument we have just tried to reproduce, there is a certain difficulty in connecting Kant's different statements. This difficulty arises from the fact, that in the chapter on *Schematism* and also in that which treats of the principle of the *Anticipations of Sense-perception,* (Wahrnehmung) Kant is seeking, as his main object, to show that the process by which the object is determined as a qualified object, involves a synthesis of the elementary data required for such perception in accordance with the conception of intensive quantity. Hence, he does not dwell upon the fact that the process of determination is at the same time a process of limitation, and that, therefore, it is a determination of that which limits and of that which is limited in opposition to each other. This, indeed, is implied in the account of such determination

as *ex parte negatio,* but it is thrown into the background by the other aspect of the process. In other words, Kant shows more clearly that the process is a continuous synthesis, by which a sensation is taken up into our consciousness under conditions of time, than that it is a determination by negation. Hence we are apt to understand him as admitting that the determination of a thing as qualified is given in sensation, and as bringing in the principle of the *Anticipations of Sense-perception* only to determine the quality as having a certain degree. In truth, however, his argument is not merely that quality must be determined as having degree, but that quality cannot be known as such except by a synthesis which involves at once positive and negative determination. What follows from this, that sensation is not even a part of our consciousness of objects, except as already determined by a conception, is just the counterpart of what was said in relation to time and space as the forms of perception. As it is only through the conception of extensive quantity that times and spaces, or objects as in time and space, become for us definite objects of perception of which judgments may be made; so it is only as referred to the conception of limitation in the form of intensive quantity, and as determined by that conception, that a sensation becomes a definite "object of sensation," a qualitatively determined thing of which anything can be said. But in such consciousness the sensation is not a state of a sensitive subject, but the perception of an object such as exists only for a conscious self. And, so taken, it implies the category by which in the judgment of experience it is determined. Hence, here also, the ultimate effect of Kant's argument is to show, not only that sensation must be determined according to the principle of the *Anticipations of Sense-perception,* but that, as mere sensation, apart from such determination, it has no place even as an element in the experience of a conscious self. This point, however (in which Kant's argument as it were returns upon itself), is always the point where he seems to recoil from the result of his own logic, and to make reservation of something given, which is independent of the determination by which alone, as

it is allowed, it can be brought into relation to self-consciousness.

The true relation of the forms of space and time to the categories of Totality and Limitation.

We are now prepared to gather up the results of Kant's view of the Mathematical Principles, and to point out the fundamental misconception which prevents it from being completely satisfactory. In both cases, Kant supposes that the schematising of the categories in relation to time (and space) makes possible a combination of factors which in pure thought would repel each other, a combination, that is, of unity and multiplicity, of reality and negation; and in both cases he thinks that this synthesis is confined by the nature of time and space to an imperfect, external, and therefore quantitative form. Now, we may admit the latter of these propositions, but not the former. Space and time, as we have already seen, are not required to make possible the combination of the conceptions of the one and of the many; for these conceptions are nothing at all apart from their unity. Nor, again, are they required to make it possible to unite position and negation, which are abstract elements of thought that mean nothing except as correlated. On the other hand, it may be admitted, that our first conceptions of things receive their colour from the external, pictorial representation of them as in space and time. It may also be admitted that in such conception, the combination of reality and negation can appear only as the external and therefore quantitative limitation of one reality by another, and the combination of unity and multiplicity can appear only as extensive quantity or number. A merely quantitative determination of things is a determination in which they may be taken as one or as many indifferently, according to the aspect in which we view them, but in which we can never conclusively determine them as totalities; for quantity, as such, has no definite limits of division or of combination except such as are determined for it from without. And so space and time, as quantities, are without limits of extension or division. In like manner, in the merely qualitative determination of things, their essential relativity is hidden from us; and consequently, the affirmation of them as so and so qualified seems to be independent of the determination of any limit to their existence as so

qualified. Such determination of things is not explicitly a relative determination of them, still less is it a determination in which positive and negative are essentially correlated with each other. It is a determination in which one thing limits another, but seems at the same time to be indifferent to it. Hence the limit itself is conceived as external and merely quantitative. In both cases, therefore, we have a synthesis which can never be final, because of the merely external relation into which the terms are brought; and it is easy to see how, under these conditions, the effort to combine the terms should give rise to an antinomy and a *progressus in infinitum*. This antinomy and this *progressus*, however, are due to an abstraction, or to put it more exactly, to the neglect of an element which, though already present in our thought, when we use the categories of quality and quantity, is not itself made the object of attention. For the truth is, not that unity and multiplicity, reality and negation, cannot be finally united in one consciousness, but that, when we so unite them, we go beyond the determination of things by the simple categories of quantity and quality. In fact, when we use these categories, we are *already* beyond them, *i.e.*, we have in our consciousness the means of correcting their inadequacy. For if we think out the category of quantity, we see that there is no meaning in a multiplicity which is not the differentiation of a unity, or in a unity which is not the principle of a determinate difference; and that, therefore, quantity, as a mere external synthesis of units, is the abstraction of one aspect of things which cannot be taken by itself. In like manner, the idea of an affirmative or positive determination of a thing which has not its negative in itself, but only meets it as an external limit, is an abstraction which breaks down when we see what it really means. Now, the fact that we bring things under such inadequate categories is immediately bound up with the other fact, that we represent them as in space and time, and do not yet recognise that they have any relations except as coexistent or successive, or as externally limiting each other in the occupation of space and time. When, however, we have reached the point of seeing that such categories are, in themselves and in their application,

antinomical, we have already begun to look beyond the antinomy to the unity of factors opposed. When we have discovered that unity generates multiplicity as its counterpart, and that this again must be apprehended as unity, which again generates multiplicity, we are near seeing that it is the very effort to take an object as one and indivisible which forces us to go beyond it, and regard it as one of many, and conversely; and that the only valid conception is that of a totality, in which each element is determined through the others. Again, when we have seen that a reality, determined as such, is by that very determination referred to another than itself, we are near to a conception of the unity of position and negation, not as a quantitative limitation of one thing by another, but as a reciprocity of determination. It is such a conception that Kant presents to us in his construction of matter, in which each factor is the negation of the other, but in which each is at the same time bound to the other, and would disappear if it were not there. But the conception of matter as the subject of two opposite forces must be essentially altered whenever the two forces are taken as correlative. For, so taken, they cannot be conceived as externally working against each other and externally limiting each other, or as gaining and losing at each other's expense. Rather, we are obliged to think of both as the manifestations of one principle, which maintains itself through the division and relative opposition of its factors, and controls that opposition by reference to the unity to which they both belong. Even, however, abstracting from this unity, and looking only to the correlation which Kant establishes between the two factors, we can see that, in the *Metaphysical Rudiments of Physics,* the mere attempt to understand what is meant by the qualitative determination of things subject to the schema of Degree, carries Kant beyond all the mathematical principles, and forces him to bring in the highest dynamical principle of Reciprocity.

Criticism of Kant's view of the relation of the ideas of extensive and intensive quantity.

There is another point of view suggested by Kant, from which the two mathematical principles may be viewed in relation to each other. Kant separates extension from intension and seems even to speak sometimes as if there

were no necessary relation between them. This separation is, however, parallel with and dependent on another, viz., the separation between the form and the matter of perception. Both, as given, have to wait for a mental synthesis and for the recognition of the principle of that synthesis. Take away the matter of sense, and suppose the synthesis exercised only on the pure manifold of space and time, and we should have as our object pure extension without intension. Take away the form of sense, and suppose a synthesis exerted on the matter, and we should have pure intension without extension. Such a separation of the two forms of synthesis, however, is, on Kant's own showing, impossible. For, on the one hand, time and space are mere forms of relation which cannot be perceived except by a synthesis which, at the same time, combines the manifold of sense as in time or space. On the other hand, though a sensation as occupying a moment in my sensitive life may have none but intensive quantity, yet it cannot be determined as thus occupying it, except by a synthesis which combines it with time in accordance with the schema of degree, and by a recognition of the unity of thought in such synthesis. If, therefore, Kant says that "apprehension by means of sensation, if we look to it only, fills but a moment," he is yet obliged to add that "intensive quantity belongs to sensation through the apprehension of it, in which the empirical consciousness in a certain time rises from nothing to a given measure"; in other words, that in order to represent a sensation as real with a certain intensity, in virtue of which it occupies a certain moment of time, we have to represent it as generated by a successive synthesis in the previous moments. It would appear, therefore, that the consciousness of intensive quantity or of occupation of time, implies the consciousness of a process in time; as, on the other hand, a consciousness of any part of time implies the consciousness of something that occupies it.

Intensive quantity necessarily related to extensive quantity.

This becomes intelligible if we consider for a moment the nature of intensive quantity or degree. A degree is simply a quantum which is contemplated as in itself continuous, so that its manifoldness is regarded as merely

the determination of its *limit*. In this way, however, it loses all its determination as a *quantum*, except in relation to other *quanta* outside of it. Thus if we consider twenty degrees of heat as the twentieth degree, we take it as a unity which has no multiplicity in itself, but which derives its determination as manifold, and so as *quantum*, from its place in a scale in which the other degrees are external to it. Thus a sensation can be represented as having a particular degree of intensity only in so far as we conceive it as generated in a process which passes through all inferior degrees up to the given amount. And this means that, if it is determined as occupying a moment of time with a certain degree of intensity, it must be by a synthesis which has reference to other moments, and so to time as an extensive quantity. The same correlation of intensive and extensive is illustrated by Kant's construction of matter out of the two opposite forces of repulsion and attraction; for the intensity of each force is measured by the extent of its influence, and a mere intensive force is just one which moves a given mass through a given space in a given time.

Kant's criticism of the explanation of degree by more or less of *vacuum*.

Kant uses the principle of intensive quantity to disprove the doctrine of the mathematical physicists, who hold that the different weights of different kinds of matter when taken in the same volume, can be explained by the existence of more or less of vacuum between their material particles. This inference is, he thinks, illogical; for we have no reason to deny the possibility of a variation in the intensive occupation of space by different kinds of matter, while nevertheless each of them is extended through the whole of the space so occupied. And he supports this objection by a reference to the impossibility of our having an experience of empty space. In truth, the inference flows from the fact that the repulsive force by which matter fills space to the exclusion of other matter, is determined only in relation to the attractive force which holds them together. Hence what is not occupied by the one object, must be occupied by the other. In the *Critique*, where Kant speaks of the limitation of the positive by the negative as the degree of a quality, it is not so clear that the negative, in relation to which the

positive is determined, is another positive. Hence, it would seem at first as if the true conclusion were, that experience can never be either of absolutely full or of absolutely empty time or space, but only of relative fulness or emptiness. It is only when we see that the negative, in relation to which the positive is externally determined, must be conceived as the limit of another positive, that the force of Kant's reasoning becomes evident. The same ambiguity, it is to be observed, appears in Kant's *Metaphysical Rudiments of Physics*, where it is said that an object fills space by repulsive force; if it did so fill it, attractive force must be conceived as emptying space, and the balance of the two forces would imply that space was neither absolutely full nor empty. In fact, however, as Kant himself points out, either force would empty space, if it were not conceived as limited by the other.[1] The conclusion, therefore, seems to be that the true positive or real—in this case, the fulness of space—cannot be found in that which is positively determined apart from its negative, but only in the unity of opposites, which implies at once their negative and their positive relation to each other.

The principle of the Anticipations of Sense-perception justifies the application of the higher mathematical calculus to experience.

The principle of the *Axioms of Perception* showed that Geometry and Arithmetic are applicable to objects of experience, because they can be objects of experience only as they are subjected to the same synthesis, by which times and spaces are determined; *i.e.*, to a synthesis according to the principle of extensive quantity. The principle of the *Anticipations of Sense-perception* [*Wahrnehmung*] shows that the higher mathematical Calculus is applicable to objects of experience, because they can be objects of experience only as qualitatively determined; and because they can be qualitatively determined only as they are subjected to a synthesis in which they are generated out of nothing according to the principle of intensive quantity. Kant does not, however, anywhere distinctly refer to this principle as a vindication of the objective validity of the Differential and Integral Calculus, as corresponding to the process by which objects are qualitatively determined in our experience, although it is an extension of his thought

[1] R. V. 358; H. IV. 400.

which is quite in his spirit, and which is favoured by some of his expressions.[1]

[1] It is, however, implied in several passages in the *Anfangsgründe*, *e.g.*, R. V. 375 *seq.*; H. IV. 413, and more definitely stated in some of the *Reflexionen*. This thought is due to Prof. Cohen (Kant's *Theorie der Erfahrung*, p. 422 *seq.*, and his separately published Essay, "*Das Princip der Infinitesimal Methode in seiner Geschichte*"). My knowledge of Mathematics is not sufficient to enable me to discuss this subject with any confidence. The passages in Kant's works and in the *Reflexionen Kant's* which bear on this interpretation are discussed by Prof. Cohen in his *Theorie der Erfahrung*, p. 430 *seq.*

CHAPTER VIII.

THE ANALOGIES OF EXPERIENCE.

Kant's first problem was to deduce causality, but in seeking to solve it, he found it necessary previously to deduce the mathematical principles.

THE *Analogies of experience* occupy a central place in the *Critique* for many reasons. They were the principles of knowledge to which Kant's attention was directed even in the earliest of his purely metaphysical works, the *Dilucidatio Nova*; and it was to them that he returned in the *Dissertation* of 1770 as the "principles of the intelligible world." [1] It was Hume's treatment of one of those principles which made him finally shake off his "dogmatic slumber," and opened the way for those investigations which issued in the *Critique,* and more especially in the metaphysical and transcendental deduction of the categories: and when he has to give a specimen of his method, he almost invariably takes the principle of causality as his example. The other principles were brought into view by the effort of Kant to do what he charges Hume with omitting to do, *i.e.,* to universalise his problem. For, no sooner had Kant seen that a doubt could be thrown on the universality and objective validity of the category of causality, than he began to ask whether there were not other conceptions of the pure understanding which were exposed to a similar challenge, and to look for that guiding thread to their discovery which he found in the finished work of Logic. Hume's argument rested upon two fundamental positions, each of which Kant attempted to turn. On the one hand, it rested on the idea that things are given in their qualitative and quantitative determination as objects in space and time apart from all mental synthesis; and, on the other hand, on the idea

[1] See above, p. 168.

that out of this given determination of things, by the aid of custom and imagination, the determination of them by causality might be explained. Now, as I have already suggested, Kant turns the first of these positions by pointing out that the mathematical determination of things involves a synthesis of the matter of sense according to its form, and the recognition of this synthesis as in harmony with the schematised categories of number and degree, or of extensive and intensive quantity. Hence, any doubt thrown on the principle of cause as carrying us beyond the simple data of perception, must equally be thrown upon the science of mathematics; and also upon all that determination of objects of experience as definitely quantified and qualified objects in space and time, by reason of which the science of mathematics has objective validity instead of being a mere systematic dream. Even, therefore, if we admitted that there could be an experience of objects apart from the use of the principle of causality or any similar principle, and that from it we might, by the aid of imagination and custom, derive that principle, we should not have escaped the necessity for a synthesis according to *a priori* conceptions. The deduction of the Mathematical Principles is the proof that such a synthesis is necessary to the determination of objects as quantified and qualified, a determination which they must have if they are to be known as in space and time.

Why Kant requires a special deduction of the Analogies.

But is this enough? Can we say that these principles are sufficient for the determination of objects of experience as such? "The two preceding principles," answers Kant, "which I have called mathematical in view of the fact that they authorise us to apply mathematics to phenomena, had to do with phenomena as respects their mere possibility. Their object was to show how such phenomena could be produced according to the laws of mathematical synthesis, both as respects the pure element in their perceptive form and as respects the real element in their empirical perception."[1] But "experience is empirical knowledge; *i.e.*, it is a knowledge which through sense-perception determines an object. It is, therefore, a synthesis of sense-perceptions, a synthesis which is not

[1] A. 178; B. 221.

itself contained in sense-perception as such, but which involves that its manifold is brought to synthetic unity in one consciousness. For this unity is what is essential to the constitution of a knowledge of the objects of sense, *i.e.*, to experience, as distinct from mere perception or sensation." [1] It is true that we have a kind of synthetic unity established by the mathematical principles. But "it is a synthesis of the homogeneous, and so of elements which do not necessarily belong to, or require, each other, as, *e.g.*, the two triangles into which a square is divided by the diagonal do not, when taken severally, require each other." But the dynamical synthesis "is the synthesis of the manifold in so far as its elements necessarily belong to each other, as, *e.g.*, the accident belongs to some particular substance, or the effect to its cause: a synthesis in which different elements are represented as heterogeneous and yet as united together *a priori*." Such synthesis "is not arbitrary" (like the other), for it is "a connexion which concerns the *existence* of the manifold." [2] Now, "experience is a consciousness of objects through sense-perceptions, and consequently it claims to be a consciousness of the relation of the manifold in existence, *i.e.*, not as it is put together in time, but as it objectively is in time: and, as time itself cannot be perceived," (so that objects could be determined in relation to it,) "the determination of the existence of objects in time is possible only through their combination in time generally; which means their combination by means of conceptions which establish an *a priori* connexion. But as such conceptions always carry necessity with them, experience is possible only through a consciousness of the necessary connexion of sense-perceptions." [3]

Explanation of Kant's view that the Analogies determine objects as *existing*.

I have already partly explained the meaning of these passages. Kant holds that the determination of objects as quantified and qualified, presupposes in its turn the determination of them as *objects* in distinction from and in relation to the self. The transcendental regress, which first brought into view the necessity of recognising the action of the categories of quantity and quality in experience, needs only to be carried a little farther to bring into

[1] B. 218. [2] B. 201 *note*. [3] B. 219.

view the necessity of this further determination of them, or in other words, of recognising that objects cannot merely be *given* as such. It is not enough to say they *are* objects and so distinct for the self that knows them; for let them be objects ever so much, we have to ask how they come to be objects *for us*. Now, Kant answers that it is just the function of the Analogies of Experience to determine objects as such, or so to connect the data of sense with each other that for us they determine objects. On this I have already remarked that the determination of objects as existing, and not merely thought or imagined, would naturally be expected to be the function of the categories of modality; as it is the modality of the judgment which alone brings into view the relation of that determination of the object which the judgment expresses to the subject who makes it. But it is Kant's view that the consciousness of the self that judges is the consciousness of that synthetic activity by which the data of sense are combined into the unity of experience. It goes along with, and is dependent upon, the recognition of the synthesis of phenomena as conforming to certain *a priori* principles. Hence, the determination of phenomena as objects existing for the self is conceived as resulting from their determination as necessarily connected elements in one experience; or we might even say, the former determination is regarded as essentially one with the latter. In Kantian language, it is only as the data of sense are combined by necessary laws into one context of experience, and recognised as so combined, that they can be known as objects, and so united with the consciousness of self. Reflexion upon the modality of objects or their relation to the conscious self, therefore, only brings into view the fact that they are determined as objects because of their necessary relation to each other, as elements in one experience. Such reflexion, accordingly, destroys that natural dualism in which objects are regarded as things in themselves independent of consciousness, and reduces them to phenomena, at the same time that it explains how, by means of the Analogies of Experience, they are determined as objects. Of the defects of this view of the modal determination of objects, a good deal has been said already,

and more will be said in the next chapter. Here it is sufficient for us to recognise that, as was already indicated in the first chapter of the Introduction, the reflexion which brings into view the connexion of things with each other according to the Analogies of Experience, a reflexion which is implied in the modern scientific view of nature, is a real advance toward a more accurate and complete view of things. And it is an advance gained in the only way in which a new development of human knowledge is possible; *i.e.*, by a transcendental regress, which makes us aware of elements previously working in our consciousness, but not previously attended to. And it is of no little interest to examine how Kant proves that such a regress is at once necessary and legitimate.

Question of the relation of inner to outer experience postponed.

He begins by speaking of the connexion of phenomena by which they are determined as objects as a connexion of them in time, which is the form of inner sense and therefore of all perception. This view is afterwards supplemented by a somewhat imperfectly developed theory of the relation of inner to outer experience; and the fact that, in the first instance, Kant pays regard only to connexion in time, must be considered as a result of the lingering psychological view of the Deduction—as if its object were to explain the process whereby a succession of sensations or perceptions is turned into an experience of objects which, as such, are in space. Kant, however, more and more worked himself free of this idea, and substituted for it the true conception of a transcendental regress as, not an account of the genesis of an intelligible experience out of elements that existed *before* it, but an attempt to realise all that experience is, and to bring to light all the elements implied *in* it. Taking the argument as it stands, however, we may paraphrase it as follows:

What Kant seeks to prove.

Experience, as the objective determination of phenomena, really means their determination as necessarily connected in time, *i.e.*, as connected in time according to certain rules which are *a priori*, and which, therefore, are not dependent upon the sequence in which these phenomena, as mere determinations of sense, are presented in the subjective experience of the individual, or in which he may arbitrarily choose to combine them in his imagination.

In other words, we recognise a perception as referring to an object, only in so far as we recognise it as necessarily related in time to our other perceptions according to certain general principles, which are not derived from the actual succession of our perceptions, but which determine that succession (as they determine all other successions). But to recognise such a connexion is not to recognise something which could be given to us from without; it is simply to discover a connexion which our intelligence necessarily introduces into the data of sense, in the very process of synthesis by which it constructs them into perceptions.

Necessity of the Analogies to universalise the determinations of phenomena as in time.

Now, what is Kant's way of proving this thesis? As usual with him, we have a dialectic which turns upon itself and reconstitutes the premises from which it starts. In other words, he begins with the supposition of that, as known independently of the categories, which in the end he shows to be a possible experience only by means of these very categories. For his purpose is to show that it is only through the application of the categories that objects can be determined as existing in time, and as in time exhibiting phenomena which succeed or coexist with each other. But at first he seems to speak as if such time-relations of phenomenal objects could be given apart from the categories, and as if the categories were needed merely to universalise them. Thus, he tells us that the conception of objects as existing, changing, or coexisting in time, does not directly involve any necessity of connexion between them. If, then, we confine ourselves to what we apprehend, what is to become of substance, causality, and reciprocity? What right can we possibly have to add to the perceived facts what is not given in them? If all I perceive is the *existence* of an object at a particular time, what can possibly give me a right to say that the object remains in existence and maintains its identity with itself beyond the moment when I am perceiving it: still more, as the principle would seem to involve, to say that it exists throughout all time? If all I perceive is a particular *change*, how can I ever be authorised to say that the succession which I see now is determined according to a universal rule which holds good

for all time? If all I perceive is a particular *coexistence*, how can I have a right to say that the coexisting objects are determined as such according to laws of reciprocal dependence, which hold good not only in this case but always and everywhere? Obviously in each of these cases, I am bringing a particular phenomenon under a category or universal form of relation, and so giving to the determination of a particular fact a universal value. But what gives me the right or the power to do so? How can I thus subsume the particular case under a law which carries me so far beyond it? Kant's answer is, that I must so subsume the particular case under the universal rule, because otherwise I could not bring it into relation with the possibility of knowledge; and it must be capable of being so subsumed, otherwise it would be as good as nothing for me.

Ambiguity in the statement of this necessity.

Now, what does this mean? Does it mean that, the particular case being given in its complete determination as a subjective appearance, I then, in order to determine it as an objective fact, bring it under the category, for which it is marked out by something in its character as an appearance? Or does it mean simply that, if I take a particular object merely as particular, without thinking of the conditions under which it can be known as such an object, I need not think of it as determined by the category; but that the moment I begin to think how it is possible that such an object should be known to me, I see that such a category is necessarily implied in it? I have already said a good deal on this subject; but, as Kant generally discusses it with reference to the Analogies of Experience, it seemed best to reserve the full consideration of it for this place. First, then, let us look at one or two of the most definite passages on the subject.[1]

"Axioms are synthetic *a priori* principles which are immediately certain. Now, it is impossible to combine one conception with another synthetically, and yet immediately; for we need a third mediating principle to enable us to reach beyond the first to the second. Now, as philosophy is nothing but rational knowledge according to conceptions, no principle can be found in it which

[1] One of the clearest passages, A. 737; B. 765, has been already quoted, p. 438.

deserves the name of an axiom. We can have axioms in mathematics, just because we can give intuitive construction to our conceptions, and so 'envisage' their objects. For thus we are able immediately and *a priori* to connect the predicates of such objects with them. Thus we can see at once, *e.g.*, that three points always lie in one plane. On the other hand, a synthetic proposition based on mere conceptions, cannot be immediately certain, *e.g.*, the proposition that 'everything that happens has its cause'; for here I must look about for a *tertium quid,* which I can find only in the conditions of the determination of the time of phenomena in an experience, and I could not immediately and directly derive such a principle from conceptions alone. Thus, we see that discursive principles are quite different from axioms or intuitive principles." [1]

"This proof does not show that the given conception (*e.g.*, of that which happens) leads directly to another conception (that of cause); for such a transition would be a leap in the dark which could not be justified. What it does show is that experience itself, and so the object of experience, would be impossible without such a combination." [2]

"In the *Transcendental Analytic,* we have deduced the principle that all that happens has a cause, by considering what is the one condition of the objective possibility of a conception of that which happens. We have proved, in short, that the determination of an event in time, and therefore the event itself, as a fact of experience, is impossible, if it does not stand under such a dynamic rule. And this is the sole ground of proof possible in such a case; for it is only as an object is determined for it, according to the law of causality, that the idea of the event has objective validity or truth." [3]

"That all that happens has a cause cannot be inferred from the conception of that which happens; rather, it is the principle in question which shows how alone we can attain a definite empirical conception of that which happens." [4]

Meaning of Kant's statement that the principle of causality cannot be analytically derived from the idea of an event.

These passages show us clearly what Kant is seeking to

[1] A. 732; B. 760. [2] A. 783; B. 811. [3] A. 787; B. 815.
[4] A. 301; B. 357; cf. also A. 722; B. 750.

express. He starts with Hume's difficulty, that what we call a cause and an effect are two phenomena which we apprehend only as standing in a time-relation to each other. He admits, therefore, that in itself the conception of an event or change does not *immediately* involve the conception of causality, does not immediately imply a universal relation of succession between the two phenomena in question. For, he goes on to ask: where can we find such a proof? The only attempt to give one, is the argument that what happens is accidental, and what is accidental has necessarily a cause in something else. But what do we mean by a thing being accidental? We do not mean merely that we can think the opposite, but rather that, as it did not exist before, it does not now exist by any inherent necessity, but only because something else causes it to exist. But this is just the principle of causality. For, to say that which comes into existence has a cause, is just to assume the principle of causality. If, then, we simply take the conception of an event in this way, abstracting from the conditions under which it can be known to us as an objective fact, we must allow to Hume that the principle of causality is explicable only as an illegitimate conversion of the mere repeated succession of like impressions into a belief in the necessary sequence of different objective phenomena.

It implies the reduction of an event to a succession of impressions.

When, however, we look at it in this way, we begin to see that a further criticism of Hume's doctrine is necessary. To say that an event or change occurs, means for Hume only that one particular impression follows another in consciousness. It is subject to this reduction, or on the tacit assumption of it,—*i.e.*, on the ground that in perception, we have given only one impression and then another after it,—that Hume denies the principle of causality. What he really shows is that the bare consciousness of perception after perception, or rather of impression after impression, does not contain in it any necessity of relation. Or, in other words, reducing an event to terms of mere sense-perception, all that we find in it is simply the consciousness of impression after impression connected by the relation of time. It is of such a sequence, and not of a change in an object, that Hume is speaking when he says that it does

not involve any universal relation of causality; for he himself admits that we can reach the objectivity of a relation only through its supposed universality. When Kant, therefore, in answering Hume, admits that the principle "that all that happens has a cause," involves a synthesis, in which we go beyond the conception of what happens, he is speaking from Hume's point of view, and reducing the sequence to that which alone, from that point of view, it can be, *i.e.*, to a mere consciousness of sequence of impressions, a perception of a sequence of perceptions. He withdraws, in fact, from the perception of what happens all determination by conception, and then asks simply whether the residuum would give us causality; and he answers that it would not.[1]

Of the three determinations of things as in time only sequence can plausibly be derived from our impressions.

Now, it is well to follow out the consequence of this a little further. The possible determination of things as in time are three: they may last through time, and they may succeed each other, or coexist with each other in time. But in such a consciousness as we have described, there is no room for coexistence, since its states are always successive; and there is really as little room for permanence, since the impressions of no two moments are exactly alike, and even if they were, this would constitute no identity between them. To say that we recognise a perception as identical with another can mean only that it is a perception of the same object; and of this objective reference we empty our thoughts just in so far as we confine ourselves to our perceptions or impressions as such. In fact, sequence is the only relation in time with reference to which it is possible even to suppose that it could be given in perception; and we shall soon find reason to question whether even this could be so given.

Hume's treatment of the Analogies in his earlier *Treatise*.

Now Hume, in his earlier treatise, had maintained, with some inconsistency, that we can through impressions be conscious of the relations of coexistence in space and succession in time, and then he had proceeded by means of these relations to explain away the conceptions of identity and causality.

In dealing with the first of these principles he had made matters easy for himself by assuming at the outset that

[1] The question whether it can be even so much as this, is not here considered.

identity is actually given to us in perception, in so far as the impressions which we have in successive moments are not different in content.[1] For, on this assumption, he had only to explain why like impressions, received after an interval, are referred to the same object—a difficulty which he solved by supposing that we confuse like impressions, before and after the interruption, with identical impressions, and that we invent the fiction of a continuous existence of an object, which is not an impression, to explain the recurrence. Causality, again, he explained as a conception generated by the recurrence of two different impressions in succession (which are, of course, identified at every recurrence as the same or of the same class), and by the increasing tendency of the mind, as affected by this recurrence, to pass from the one impression to the "idea" of the other. Reciprocity he did not deal with, but it is easy to see that, on the same method, he would have been able to generate it out of the repeated co-existence of different impressions; nor would any great difficulty have stood in his way in such an explanation, seeing that he had already prepared the way for it by treating the relations of things in space as given directly in our impressions, in spite of the successive character of the latter.

Hume makes the problem easier in the *Inquiry* by confining it to causality.

In Hume's later work, the discussion upon identity disappears, and with it the difficulty of generating permanence, coexistence and succession out of the same perceptive consciousness, which is, as Hume describes it, a "bundle or collection of impressions and ideas, succeeding each other in perpetual flux or movement." For, he has now to deal merely with the one *perceived* relation of succession, and the parallel *conceived* relation of causality. Further, the omission of the discussion upon identity has made it easy for him to treat the consciousness of an objective change as nothing more than the perceived presence in our consciousness of one impression after another. Hence, in order to the reduction of the knowledge of objective changes to impressions, nothing more is needed than the confusion of such a consciousness of impressions as succeeding each other in time with the successive impressions themselves.

[1] Cf. Green's *Introduction to Hume's Treatise*, § 236 *seq.*

Kant, on the other hand, deals with the three Analogies as essentially connected with each other.

Now, there seems no ground to believe that Kant ever read the *Treatise*. But his argument carries us back to the conceptions of the *Treatise,* in so far as he adds coexistence to succession, and permanence to both, as "modes" of Time, and thus raises the question not as to causality alone, but also as to substance and reciprocity. And it is to be noted that he dwells on the impossibility of getting either permanence or coexistence out of a consciousness which is merely successive, and that he clinches his argument by pointing out that neither the succession nor the coexistence of different phenomena can be perceived by us, except as relations of the states of the permanent. In other words, he throws on the perceiving consciousness the weight of all the different relations of its matter which it will have to bear, if all the determinations of objects in time are to be explained out of the time-relations of impressions; while he also points out that these time-determinations are not isolated from each other, so that one of them could be explained without the others. And, in particular, he shows that the other time-relations of phenomena have for their basis the consciousness of a permanent self-identical object, which does not change with the change of its successive states.

"The three Analogies of Experience are nothing but principles for the determination of the existence of phenomena in time, according to all its three modes:—their relation to time itself as a quantum, (the quantum of existence, *i.e.*, duration); their relation in time, regarded as a series or succession of moments one after another; and, finally, their relation in time, regarded as having a certain breadth or compass in which all existence is included at once. Such a unity of the determination of time is completely dynamical, *i.e.*, time in it is not viewed as that in which experience immediately determines its place for every existence. That indeed is impossible, seeing that absolute time is no object of perception, with which phenomena could be brought into relation. But the rule of the understanding, through which alone the existence of phenomena can get synthetic unity in accordance with the relations made possible by time, determines for every phenomenon its place in time, and so determines

it *a priori* for all time, and for every time." "Our Analogies, therefore, exhibit the unity of nature, as it manifests itself in the connexion of all phenomena under certain exponents, which can express nothing but the relation of time (in so far as it embraces all existence within itself) to the unity of apperception, which can realise itself only in a synthesis according to rules. Taken together, what they express is, that all phenomena lie, and must lie, in one Nature; since without this *a priori* unity there could be no unity of experience, and, consequently, no determination of objects in experience.

Characteristics of the Transcendental Deduction of the Analogies.

"In regard to the manner of proving these transcendental laws of nature to which we have recourse, and the characteristics by which it is distinguished from other ways of demonstration, I shall make one remark, which must be of the highest importance as a prescription which we can lay down beforehand for every attempt to prove intellectual principles which contain an *a priori* synthesis. If we had endeavoured to prove these Analogies dogmatically, *i.e.*, from conceptions,—if, in other words, we had attempted in this way to prove that nothing exists except what is found in a permanent object, that every event presupposes something in the previous state of things on which it follows according to a rule, and, finally, that the states of things that coexist are determined in relation to each other according to a universal rule of coexistence,—all our endeavours would have been in vain. For, it is impossible to pass from one object and its existence to the existence of another or its manner of existence merely by means of the conceptions of them, however carefully we may analyse these conceptions. What, then, was left for us to do? All that was left for us, was to take our stand upon the possibility of experience, as a form of knowledge in which all objects must finally be capable of being given to us, if the ideas of them are to have objective reality for us. In this *tertium quid,* the essential form of which consists in the synthetic unity of the apperception of all phenomena, we found certain *a priori* conditions of the complete and necessary determination of all phenomenal existence in time, without which even the empirical determination of time would be impossible. In these, there-

fore, we discovered rules of the *a priori* synthetic unity of experience, by means of which we are enabled to anticipate its facts." [1]

The Analogies as conditions under which objects as existing in time and the sequence and coexistence of their states can become known to us.

It is worth while to notice how Kant here states the principles which are to be proved by means of the idea of the possibility of experience. The first is the principle that all that exists must be found in that which is permanent, *i.e.*, that all existence is summed up in permanent substances and their states. Now, Kant maintains that the mere conception of an object does not imply that it is a permanent substance. It is seen to do so, only when we reflect that we cannot *know* any object as an existence in time, unless we refer our perception to a substance, which we conceive to remain the same through all changes of its states or determinations. Again, the conception of an event, if we think of it simply as the coming into existence of something that did not exist before, may be analysed as we please, and we cannot get out of it any necessity of connecting it with any other event which preceded it in time: but when we ask how we come to *know* that something happens, or begins to be, we have to recognise, that for us nothing can begin to be except the state of a permanent object, and that that state can begin to be only as determined according to a universal rule in relation to some previous change. Finally, we cannot, from the mere conception of coexisting things, draw the inference that they reciprocally influence each other's states, but this inference becomes necessary whenever we reflect on the conditions under which such a relation of existence can become *known* by us; for then we find that we cannot connect the states of substances coexisting, except on the presupposition of such influence.

Ambiguity in this deduction.

Now, I have already indicated the point of view which we have to take up in order to appreciate Kant's argument. It is confused somewhat by the fact that, following Hume, Kant does not, in the first instance, divest the perceptions of that qualification by conception, which he afterwards shows to be necessary to them in order that they may become elements of experience. No doubt he corrects this when he speaks of the perceptions as a mere manifold,

[1] A. 215-17; B. 262-3.

which imagination takes up in succession as it is given. But, if we take as our starting-point the consciousness of objects as existing in time,—of events as occurring in time, and of the states of different things as coexisting in time,—we already presuppose that determination of perception by the necessary relations expressed in the categories which Kant seeks to prove. The objects of such a consciousness are already *conceived* objects, and not merely sense-perceptions. Hence, in the process of showing the necessity of the determination of perceptions by the categories, Kant is obliged to withdraw from objects perceived the attributes he had lent them. He is, in fact, simply showing that objects cannot have for us the predicates which we attribute to them in our ordinary consciousness, except by the aid of a principle which in that consciousness we usually leave out of account; and so is teaching us to rise above the natural abstraction in which we take objects as if they were things in themselves, given as objects in space and time, but otherwise unrelated either to each other or to the self.

It really is the correction of our first abstract view of objects.

We may put it thus:—the point which Kant would prove is, that in relation to possible experience, the perceptions become qualified by conceptions, and hereby are determined as cases of universal laws, while in themselves, as perceptions, they express mere particular facts. Now, the real meaning of this process lies in this, that the ordinary consciousness in its determination of objects abstracts from, or neglects the subject for which they are. Thus, things are conceived as existing, and events as taking place, without reference to the fact that they are objects for a subject, or to the conditions under which alone they can become such objects. Hence, when we correct our abstraction and restore the conditions which were left out of account, we seem to be attaching new conditions to those objects, whereas all that we do is to call attention to conditions hitherto overlooked. From this point of view, then, it may fairly be said that, when we consider things in relation to the possibility of knowing them, we find a new light thrown upon them which was not there so long as we took them as things in themselves, determined to be what they are independently of any such

relation. It is in this sense that Kant's assertion of the phenomenal character of the objects of experience really throws so much light on them. And it is open to us, from this point of view, to say that objects, considered without reference to the possibility of knowing them, have not the predicates that belong to them when considered in that reference.

Particular objects in particular time-relations are known through universal principles.

If we ask how our ordinary conception of objects needs to be remoulded by this reference to the subject for which they are, the answer is that, taken apart from their relation to the subject and the conditions under which that relation can be established, objects appear as merely particular, *i.e.*, not as instances of any principle that goes beyond themselves. Thus, when I say that I am conscious of an object as such, I appear to be expressing merely that which is present to me now and here, but which may never be presented again. When I say that I am conscious of an event as occurring, I appear to be saying merely that one phenomenon makes room for another in my perception, without any implication of a universal relation between that which comes to be and that which disappears. And when I say that I am conscious of two objects as coexisting, this does not seem to involve any correlation that goes beyond the moment of time in which they are so determined. But, when I reconsider these propositions in the light of the idea that the objects I am speaking of are objects known,—objects, therefore, which imply a subject, and which are capable of being united with the self-consciousness of that subject, as one subject through all the variety of its experiences,—I begin to see that this determination of objects implies conditions which I have not yet taken into account. And these conditions, according to Kant's argument, are just the dynamical relations of substance and accident, cause and effect, and reciprocity. No object can exist for us through an impression of sense, except in so far as the content of such impression is referred as a quality or state to some object, which is permanent and so independent of the impression. No events can be conceived as occurring simply because one impression makes room for another, unless the content of the impressions so referred to a permanent object, are conceived as

necessarily connected by a law which is independent of the particular impressions or states in my subjectivity. And no coexistence can be established, unless our successive experiences have their content referred to different objects which are permanent, and which are fixed as in one time by a law of necessary dependence—a law which determines their succession in our consciousness and is not determined by it.

How the *consciousness* of these principles adds to our previous knowledge of these objects.

Now, it is to be observed that this process may, in one point of view, be described as adding to perceived objects predicates which are not analytically contained in them, but which are combined with them only in relation to the possibility of knowledge. For, taken apart from this possibility, the objects are considered to present themselves as mere particulars, and not as particular instances of universal principles:—particular objects in a particular time and space, with respect to which we cannot know whether they will ever again present themselves in time and space; particular events, as to which we can never know that they are connected with any general conditions under which they must occur; particular co-existences, of which we cannot know that they are more than accidental coincidences. On the other hand, nothing is really added to the conception of the objects by this new synthesis, so far as these particular objects or events are really *known* objects and events; since, as such, they must contain all the conditions that belong to known objects, however little these may be present to the consciousness of the individual who knows them. Hence, from this point of view, the movement of thought which enables us to recognise the conditions under which the particular objects are known as they are known, leads us to withdraw from them, as apart from these conditions, the qualifications which they seemed to have when they were taken as things in themselves, *i.e.*, as objective facts given independently of any relation to a subject.

Positive and negative aspects of the Deduction.

The meaning of Kant's argument then, in its first aspect, is that it calls attention to the conditions under which objects or facts are known, and shows that they are known as particular objects or facts, only in relation to a self-consciousness, which always determines its objects through

universal principles. As relation to the subject is part of the idea of the object, so it *is* an object only as determined by principles which make it no longer a mere particular. From the point of view of the possibility of experience, therefore, we may enrich our empirical knowledge by recognising, in each empirical fact as such, a determination by universal principles. On the other hand, from the point of view of the perceived object, if we take that object as what it was originally supposed to be—as an object merely given to the understanding and not determined by it—we find that we must divest it of the qualification it seemed to have, and reduce it to bare perception or sensation. Like the will-o'-the-wisps in Goethe's allegory, we suck out the veins of gold that made the clay image stand, and it falls together in a confused heap, as a mere 'manifold of sense.' Now, admitting for the moment that this manifold could be apprehended by sense as a series of subjective states succeeding one another in time, it can be shown that, out of this mere succession, we could not get any objective consciousness whatsoever; and that the categories must come in to add to perceptions something not contained in them, ere we can reach such a consciousness. But the addition now takes a slightly different appearance. It is not that the object or fact, taken as a particular object or fact, carries with it no consequences beyond its own immediate existence or occurrence in this moment and at this spot; for we now discern that its determination as a particular object for us involves universal principles, which carry us far beyond its particular existence. But it is that, taking the mere perception or impression of sense as it really is, we find that it does not contain the determination in virtue of which it represents to us particular objects. Now there is in Kant a certain want of adjustment in these two aspects, which makes it difficult for us to see whether he is speaking of what is given in sense as it really is,—in which case he is speaking of that which in itself cannot be an object of knowledge, and which, therefore, requires to be combined with a conception not in it, ere it can become such an object; or whether he is speaking of the particular object of knowledge, which is not *recognised* as being determined by universal principles but which

really is so determined,—in which case he is speaking of an object which is not only perceived but conceived, and which we need only to understand in order to see that it is not a mere particular, but an instance of a law.

After this general explanation of the method of Kant's deduction, we may now go on to consider how he applies it to each of the Analogies of Experience:—to the principle of Substance, to the principle of Causality, and to the principle of Reciprocity.

Statements of the principle of Substance in the first and second editions.

The principle of the permanence of substance, as stated in the first edition of the *Critique*, is that "all phenomena contain the permanent (substance) as the object itself, and the changeable as its mere determination, *i.e.*, the manner in which the object exists." In the second edition, the formula is—"In all change of phenomena the substance is permanent, and the quantity of it in Nature is never either increased or diminished." The formula of the first edition brings out more definitely the twofold aspect of the principle, as involving a correlation of substance and accident, each of which is determined in relation to the other; while that of the second edition starts with the assumption of the fact of change, and goes on to refer the changing to the permanent as its necessary presupposition.

The latter statement agrees more exactly with the form of Kant's deduction.

Now, the former mode of statement corresponds most exactly with what we should expect from the general account of Kant's method. For, according to that method, we should expect him to prove that, while the mere conception of an object does not necessarily imply that it must be conceived as a permanent substance in a changeable phase of its existence, we are obliged so to conceive it whenever we consider the conditions under which alone we can know objects. In other words, we should expect him to show that the distinction of an object from the perception of it, which is implied in its determination as an object, cannot be made except by the application to it of a category which determines it as, or changes it into, the consciousness of a substance manifesting itself in a special accident; or, passing from the category to the schema, the consciousness of an absolutely permanent object in a special changeable phase of its existence. The deduction would, therefore, consist of two parts; first, of

the proof that the mere conception of an object *in abstracto* does not imply that it is a permanent substance which manifests itself in changing states; and secondly, of the proof that such a determination of the object is necessary whenever we consider how it has become known as an object to us. As a matter of fact, however, Kant's argument takes a somewhat different course,—viz., the course indicated for it by the formula of the second edition; and what he attempts to show is, not that any object *for us* must be determined as a permanent subject of changeable states, but rather that no consciousness of change is possible which is not a consciousness of the sequence of states in a permanent substance, and that no consciousness of the coexistence of objects is possible which is not a consciousness of the co-existence of such changing or changeable states in different permanent substances. In other words, he does not directly attempt to connect the idea of an object as known by us under conditions of time, with the idea of permanence in change; but, taking his stand on our consciousness of objective sequence and coexistence, he endeavours to prove that such a consciousness presupposes the consciousness of permanent substances, in which, and by relation to which, such sequence and coexistence are determined. And his language is in agreement with this view when he speaks of this category as " put under the head of Relation, rather as being a condition of all the other relations than as itself being one of them." [1] The principle of substance is thus proved with a double indirectness; *i.e.*, not as the principle involved in the determination of an object as existing for us in time, but as a principle presupposed in those other principles, by which objects are determined for us as changing or coexisting.

A reason for this treatment of causality may be found in Hume's statement of the problem.

Now, one reason for this anomaly might be found in the fact that Kant was following Hume in his *Inquiry*. For in that work, which was the only source of Kant's knowledge of Hume,[2] the idea that the only fact underlying the

[1] A. 187; B. 230.

[2] Or at least the only direct source. It has been maintained that Kant's view of Hume was partly derived from Beattie, whose Essay on the *Nature of Truth* was translated into German in 1772 (Vaihinger, I. 347). The knowledge to be got from this source would not, however, affect the point we are here considering.

consciousness of necessary relation is sequence of impressions, is applied only to the causal principle, and not to the principles of identity (or substance) and reciprocity. And, as I have already indicated, half the plausibility of Hume's argument is due to this limitation. For, it is only the principle of causality which could even be *supposed* to be generated from impressions which are always successive. Indeed, when Hume had once identified the sequence of impressions with the consciousness of such sequence, and had assumed that the consciousness of such sequence can be given apart from any other consciousness, he could easily explain how custom should generate necessary relation out of repeated consciousness of sequence. Now, Kant does not, in this connexion, directly attack Hume's assumption that the sequence of impressions involves a consciousness of such sequence. But he points out, *first,* that such a consciousness of inner sequence cannot explain the consciousness of the permanent, which is implied in all determination of objects in time; any more than it can explain the consciousness of a coexistence of objects, the impressions of which are for us necessarily successive. Hence, *secondly,* it cannot explain even the consciousness of objective sequence or change, which we can have only on the presupposition of the former, and in contradistinction from the latter. We cannot get the permanence, coexistence, and succession of objects all out of the same subjective sequence of impressions, even supposing we were to be conscious of that sequence. And as these relations of things as in time are known only in connexion with, and in distinction from each other, we cannot get from it any one of them in the sense required, *unless* the relations of our sequent impressions are determined by principles which are not given in the impressions themselves.

Reason for it in the view of Time given in the *Aesthetic.*

But there is another and more important reason for the indirect way in which Kant deals with the principle of causality, which, however, cannot be fully stated till we have examined more closely the nature of his Deduction of it. In that Deduction, Kant seeks to show that the determination of things as permanent substances is the presupposition of all determination of them in time, and

especially that it is presupposed in the determination of succession and change in them. To understand this proof, however, we have to recall the "metaphysical exposition" of time in the *Aesthetic,* and especially Kant's assertion that time is not a general conception which expresses the common element in many particulars, but that, on the contrary, particular times are limitations of the one time which is their presupposition. Thus all time-relations, whether of coexistence or of succession, presuppose the unity of time. Now, the *Analogies* are "principles for the determination of the existence of phenomena in time according to its three modes,—according to their relation to time itself as a quantum (the *quantum* of existence, *i.e.*, duration); according to their relation in time, as a series of moments or times (one after another); and again, according to their relation in time, as having a certain breadth or compass in which all existence is included (at once)." [1] But the first of these relations is, according to Kant, the basis and presupposition of the other two; in other words, we cannot determine phenomena as sequent or coexistent, except as we refer them as states to objects which persist or endure throughout all time. To prove this, we must consider, on the one hand, the idea of time and the different relations which it makes possible; and, on the other hand, the conditions under which objects may be determined, according to their different possible relations. Now, while, as we have seen, the consciousness of time, in its unity or identity through all difference of times, is the presupposition of the relation of coexistence and succession, yet time in its unity is nothing but the presupposition of these relations. Time, indeed, is the mere form of the relations of phenomena which are determined as coexistent or successive, and therefore it might be argued that we cannot perceive it by itself either in its unity or in its differences. We cannot take time as a permanent unity and date phenomena in their succession or coexistence in relation to it, any more than we can take time in its changing difference and, in relation to it, recognise objects as permanent. But, in determining phenomena as successive or coexistent, we presuppose the

[1] Als einem Inbegriff alles Daseins (zugleich).

unity of time, and therefore we are obliged to refer them to objects which are permanent, and which as such "represent" the unity of time. "Change can be apprehended only through the permanent and as the alteration of it. For the distinction of the times in which things are, can be perceived in them only as parts of one and the same time. All change is only division of time; therefore, there must be something which exists through the whole time, because the whole lies always at the basis of the division. Therefore, the substance is the substratum and the changing is only the mode of its existence." [1] We can, in fact, connect successive phenomena as in time, only as we determine them as states of a permanent object. Hence Kant declares that "only the permanent changes," and that which has no permanence—that which passes away absolutely and is not contained in anything else which abides—cannot be determined as changing; for if anything were thus successive, its different parts could not be connected as in one time. We might be inclined to ask whether, on the same principle, we must not say that "only that which changes is permanent"; for it is obvious that we cannot determine anything in relation to the unity of time, except in so far as we also determine it in relation to the difference of times. But Kant does not put it in that way; because he conceives that, while we know particular times as parts of one time, yet this does not mean that the one time is presented to us first, and that then we determine particular times by limitation of it; but merely that, in determining particular times in relation to each other, we presuppose the unity of time. But, as we are not conscious of the difference any more than of the unity of time by itself, this means that we do not at first determine the object as permanent, and then connect its successive phenomena as its changing states, but that, in connecting phenomena with each other as successive changing states, we presuppose the permanent identity of the substance. This way of looking at the matter explains why the principle of substance is regarded by Kant merely as a presupposition of the other analogies, and especially why Kant starts, not with the idea of an object existing through

[1] Erdmann's *Nachträge zu Kant's Kritik*, § 79.

time, but with the idea of change, and why he proves the principle of substance as well as that of causality as necessary to the knowledge of change. Change, as we shall find, is with Kant the empirical fact which is at the basis of all other empirical facts, in such a sense that we might even say that the main work of Kant was to make the consciousness of objective change intelligible; or, in other words, to explain how changing phenomena could be brought into relation to the unity of thought and subsumed under it. Hence, we find him, on the one hand, insisting that change can never be other than an empirical fact which belongs to the objects as given, and which is not capable of being anticipated by pure thought; for the pure unity of thought—which, even when it becomes self-conscious, is conceived by Kant to be purely analytic—could not, of course, give rise to the idea of change. On the other hand, he does not, indeed, insist upon the idea that change is the fundamental fact in all experience; but he constantly assumes that it is so, and he directly states that motion is the central fact in all external experience.[1] And, if we may here anticipate the result of Kant's whole discussion of the *Analogies of Experience,* we find that the way in which he answers the above question as to the possibility of change as a fact of experience, *i.e.*, the possibility of its being brought under the unity of thought, is to point out—first, that it must be conceived as the change of a permanent object, which through all changes remains one with itself;

[1] In the Introduction to the *Metaphysical Rudiments of Physics*, R. V. 317; H. IV. 366. "The fundamental determination of anything that is to be an object of external sense must be motion; for by motion alone can that sense be affected. To this also the understanding reduces all the other predicates of matter which belong to its nature. Hence natural science is nothing but a pure or applied doctrine of motion." As, according to Kant's doctrine (especially as it is developed in the second edition of the *Critique*), inner sense is simply a consciousness of the successive process of determination from within, by which the determinations of sense from without are taken up, and by which the consciousness of external objects is thus generated, we may say that motion is the fundamental fact of experience. But this subject will be discussed in the next chapter. When Kant says that "by motion alone can external sense be affected," he cannot be taken to mean that the thing in itself moves and so stimulates our senses, (which would involve the absurdity that the thing in itself which, *ex hypothesi*, we do not know, is known as material substance,) but merely that external objects can be known only as moving or movable substances.

but, secondly, that all the successive changes of substances must be conceived as necessarily connected; and lastly, that they must be conceived as the reciprocally determined changes of the parts of an unchangeable whole. In this way the facts of the changing phenomenal world are, as it were, brought back under the unity of thought, though not even thus perfectly harmonised with its pure self-identity. For, it is to be observed that what we have in the laws of substance, causality, and reciprocity, is only "Analogies" of experience; *i.e.*, something in experience which, though not identical, is *parallel* with the relations of pure thought to itself shown in the judgments of relation, as analysed by formal logic. The identity of the subject with the predicate in the pure categorical judgment thus appears, in relation to a changing matter given under conditions of time, as the permanence of substance under the change of its states; the analytical connexion of reason and consequent in the pure hypothetical judgment, when applied to successive events or changes, appears as their necessary sequence; and the analytical unity of the genus with itself in all its species, as the necessarily contemporaneous changes of the parts of a permanent whole. Thus conceived, the changing world of phenomena is subsumed under the schematised unity-in-difference of pure thought, in which, even as judgment, the difference is transparent. Or, to put it otherwise, the world of objects in all its differences in time and space, is conceived as an *analogon* of the pure unity of apperception; and is so made capable of being joined with the consciousness of that unity, though it can never be identified therewith.

Meaning of the term, 'Analogy.'

Before criticising this view, it is, however, necessary to refer to a modification of it which Kant himself suggests in the second edition of the *Critique*. Kant's argument is that, as special times are limitations or determinations of the one time which remains identical with itself through all the change of times, so all the special determinations in which an object in time manifests itself are to be regarded as modifications of an object which remains one with itself through all their change. The object in time must endure while it changes, because all times are determined as successive in the one time; and this, as time is not per-

Defect of this deduction. How Kant seeks to remove it by introducing the determination of objects as in space.

ceived by itself, means that the connexion of successive states must be determined as a succession in the one substance. To this it may be objected that to say that "time itself does not change," is like saying that passing away does not itself pass away. So far the endurance of time and the permanence of the changing might even seem to mean only that the moments of time never cease to pass away, and the changing never ceases to change. A perpetual flux would therefore sufficiently "represent" all the permanence that is in time.[1] To try to extract, from the necessity of determining change as in time, the idea that the "quantity of substance that changes can never be increased or diminished," seems to be absurd. For time has no quantity except continuance, and a continuity of change would therefore seem to be all that is, on this ground, required in the object. In the interval between the first and the second edition, Kant seems to have become aware of this, and to have come to the conclusion that time itself can be represented only in relation to space, and that therefore the principle of substance can be applied only to an object which is not merely in time, but also in space. Thus, in one of the manuscript notes on the first edition which have been recently published, we find him declaring that "the proof (of the principle of substance) must be so given that it applies only to substances as phenomena of external sense. Consequently, it must be drawn from space, which, with its determinations, exists at all times. Now, in space the only possible change is motion,"[2] *i.e.*, a

[1] For a perpetual flux never changes its relation to time.

[2] Erdmann, *Nachträge zu Kant's Kritik*, § 80; cf. §§ 77, 79, 81. Erdmann suggests that the reason why the Deduction was not remoulded, was that this would have involved also a complete remoulding of the chapter on the Schematism, in which the categories were schematised only in relation to time. In fact, in the first edition, inner and outer experience seem often to be taken as co-ordinate, and, therefore, the principles of pure understanding have to be stated generally, and in a way that makes them applicable to both. In the second edition, inner experience is regarded as dependent upon outer experience, or as arising in the return upon self from it; and, as a consequence, outer experience takes the place of experience in general. If this thought had been fully worked out, the "Metaphysical Rudiments of Physics" would have been absorbed into the *Critique*. This subject has been referred to above in the chapter on the *Deduction of the Categories* and will be more fully considered in the next chapter.

change in the relative position of objects which remain otherwise unchanged. Unfortunately this new view of the matter is not introduced into the deduction of the principle of substance in the second edition, but only brought in, in certain general supplementary remarks upon the principles of the pure understanding. Thus Kant declares that "in order to supply something permanent in perception which corresponds to the conception of substance, we need a perception (of matter) in space; for space alone is determined as permanent, while time and all that is in inner sense is in constant flux."[1] Now, this would seem to involve that in treating permanence and coexistence as well as sequence as modes of time, Kant was referring to things as in time determinations which they have only as being also in space. Time and space by this reciprocal qualification give, as it were, new dimensions to each other; for it is the relation of time to space which, in the first instance at least, enables us to think of coexistence as a mode of time; time in itself being merely a relation of transitory movements as after each other, until we regard what Newton calls the "*ubiquitas temporis*";[2] while it is the relation of time to space which enables us to think of space (in itself merely a relation of parts which exist together with each other) as enduring through different times. Thus, it is as schematised in reference to space as well as to time, that the self-identity of the object, (which remains one with itself through all its differences, in correspondence with the unity for which it is,) becomes translated into the maintenance of its *quantum* or the multitude of its external parts, which makes it capable of occupying space. And in this connexion, Kant is led to what seems a direct contradiction of his assertion that the existent in time must be permanent.

[1] B. 291.

[2] Kant's *Dissertation*, § 14: R. I. 319; H. II. 408. "Though time is of one dimension, yet the ubiquity of time (if I may use an expression of Newton's), by which all things sensible are *somewhere*, adds to the quantity of real things another dimension, in so far as they, as it were, hang upon one moment of time. For if you picture time as a line produced *in infinitum*, and coexistents by lines applied at right angles in any point of time, the superficies which is thus generated will represent the *Mundus Phaenomenon* both in its substance and its accidents."

Only the object of external sense can be regarded as a *permanent* substance.

"What essentially characterises the substance, which is possible only in space, and under spatial conditions, and, therefore, only as the object of *external* sense, is that its *quantum* cannot be increased or diminished without substance coming into existence or being annihilated; for the quantity of an object, which is possible only in space, must consist of parts which are external to each other, and these, therefore, if they are real (something moveable) must necessarily be substances. On the other hand, that which is regarded as an object of inner sense may, as substance, have a *quantum* which does not consist of parts outside of each other, and its parts are, therefore, not substances, nor should their coming into existence or their going out of existence be regarded as the creation or annihilation of substance. Their increase or diminution is, therefore, possible without prejudice to the principle of the permanence of substance." [1]

Changes in the deduction of the Principle of Substance which this would necessitate.

The proof of the principle of substance in relation to changing objects determined in space would, as appears from the indications which Kant has furnished, have followed the same course as that which is now given in relation to time. It would have rested on the idea that any change other than the motion of the parts of matter relatively to each other, any change which involved the diminution or increase of the substance moved, would make the consciousness of such motion impossible. For, as we do not perceive space itself, we cannot determine changes of place in it except as movements in a substance which represents space, *i.e.*, which is as unchangeable as space itself; in other words, we must determine them as changes of the position of the parts of a substance which, as a whole, remains unchangeable. This is well expressed in another manuscript note of Kant. "If substance endures while accidents change, but substance apart from accidents is the empty abstraction of the substantial, what is it that endures? All that in experience can be distinguished from the changing is the quantity" (*i.e.*, of

[1] *Metaph. Anfangsgründe*, ch. III.: R. V. 405; H. IV. 437. In the next chapter we shall have to deal with Kant's argument against Idealism, in which he contends that inner experience derives its time-determination by reference, not to a substance underlying its changes, but to the external *substantia phaenomenon* in space.

matter), "and that can be estimated only by the greatness of the merely relative effect" (of different matters) "in similar external relations. The principle of substance, therefore, can be applied only to material bodies." [1] The last words mean that the mass of quantity of a substance in any material object can be estimated, only by considering its relative effect in producing motion as compared with other bodies moving with the same velocity. Of course, no such estimate can be applied to the whole world, but only to the parts of substance in relation to each other. Hence the assertion that the *quantum* of substance in nature is capable neither of increase nor of diminution, does not mean that we know the world in space as a definite and limited *quantum*, of which each particular substance is a part. We have no experience of the world as a whole, or of its relation to empty space; and, indeed, the attempt to determine the world as either limited or unlimited, gives rise to an antinomy, which Kant solves only by showing that, as we can never complete the synthesis of objects determined as in space, we can never represent the world as a whole. The only meaning, therefore, which can be given to the assertion that the *quantum* of substance in nature is constant, is that in the relations of different substances to each other as moving, there is something which presupposes a constant relation of all substances to the space they occupy. In other words, we cannot determine them as changing place in relation to each other, unless we presuppose that there is no change in their character as occupying space. And, therefore, if we say with Kant that they occupy space in virtue of the repulsive and attractive forces they exert towards each other, we must say that relatively to each other, the parts of matter are determined by forces which vary in inverse ratio to some function of their nearness to, or distance from each other, according to an unchangeable law.

The Principle of Substance is deduced merely as the presupposition of the other Analogies.

As to this general line of proof, we may remark that it starts with the conceptions of the *Aesthetic*, according to which space and time are represented as infinite given wholes, and all particular spaces and times are reached by the determination of these given wholes: but it

[1] Erdmann, *Nachträge*, § 81.

immediately corrects this representation, by pointing out that these infinite wholes are mere forms of relation, which are not apprehended for themselves, but only as the presupposition of the determination of phenomena in space and time in relation to each other. For, while we cannot directly relate phenomena to space and time, it is only on the presupposition of the permanence of their relation to the time and space which they occupy, that we can relate them to each other. As all times are in one time, which, however, is not perceived as one, but is simply a permanent form of relation; so, Kant argues, all changes are in one substance, which does not pass away, since, if it did, it could not be determined even as passing away, And as all spaces are in one space, of the continuity of which they are determinations, and as space also is not perceived, but is simply a permanent form of relation: so all determination of objects as changing their relations in space, *i.e.*, as moving, presupposes a permanent substance in which such relative changes take place. But (since all our knowledge of external objects is based on their change or motion) this means that all our determinations of objects as in space and time, are determinations of their states as changing or changeable in relation to each other; determinations which would be impossible unless we presupposed a substance which remains identical with itself through all the change of its parts. Hence, we cannot determine phenomena in relation to each other as in space and time, unless we regard each phenomenon as a changeable state of a permanent substance. Only as so determined can a phenomenon form a term in a relation of succession or coexistence which can be referred to objects. This, indeed, looks like saying that the phenomena must be presupposed as objective in the very acts by which they are referred to objects. But this apparent circle really means that the reference of a phenomenon to a permanent object, and its connexion with other phenomena according to laws which determine its relations to them in time and space, are different aspects of the same process which are only ideally separable. Or, to put it in a slightly different way, it is only as they relatively determine each other's place and time according

to universal laws, that they are referred to a world of objects which remains one with itself through all the differences of spaces and times; and, conversely, it is only on the presupposition of such unchangeable identity of the whole, that the relative determination of the parts becomes possible. Kant's expression of this is somewhat obscured by the way in which he separates the proofs of the different Analogies, showing first that change implies permanence; then, that change can only be known as determined by previous change; and, finally, that the succession of states in different substances implies a reciprocal determination of each by the others. But he partly corrects this imperfection of statement by treating the first analogy as the mere presupposition of the second; and, as we shall see, he shows also, though less distinctly, that the second may be regarded simply as the presupposition of the third. For each partial substance can be defined only as a "complex of mere relations"[1] to the others, and the phenomenal identity of the whole is known only as the necessary presupposition of all relative determination of the parts by each other.

For the substance is nothing apart from its accidents.

The relation of the principle of substance to the other analogies as merely their presupposition, is expressed most definitely in the following passage:—

"The determinations of a substance, which are nothing but its special modes of existence, are called its accidents. They are always real, because they relate to the existence of the substance. (Negations are only determinations which express the non-existence of some determination in the substance.) Now, when we attribute to such real or positive determinations a special existence in the substance (as when we regard motion as an accident of matter), we call this existence *inherence*, in distinction from the existence of the substance, which we call *subsistence*. But this way of speaking gives rise to many misconceptions, and it would be at once more definite and more accurate to say that the accident is only the mode in which the existence of a substance is positively determined. Yet we must acknowledge that, by the conditions of the logical use of our understanding, we are constrained, as it were,

[1] A. 265; B. 321.

to isolate that in the existence of a substance which can change while the substance remains, and to set it, as an accident, over against that in the substance which is permanent and fundamental; hence also we put this category under the head of Relation, rather as being the condition of all relations than as being itself one of them." [1]

This limitation of substance Kant regards as due not to the laws of thought, but to the sensuous conditions of our knowledge.

In this paragraph, Kant emphasises the truth that it is through the accidents and their relations that the substance exists for us. The substance, in fact, is nothing in itself apart from its accidents and their relations. Yet we find ourselves obliged "by the conditions of the logical use of our understanding" to distinguish two aspects of the real, the permanent and the changeable, and to refer the latter to the former as predicate to subject. And Kant fears that this duality in our determination of objects may easily lead to the idea of a determination of the object in itself, as a substance apart from the determination of its accidents and their relations. It is, however, only in reference to the determination of the reciprocal relations of the phenomena which we call the accidents of substances, that the determination of them *as* substances has any value. Now, Kant holds this to be just one of the cases in which the determination of things in our experience does not conform to their determination in pure thought. "In an object of pure understanding, only that constitutes its inner being which has no reference (as regards its existence) to anything different from itself. But contrariwise, the inner determinations of a *substantia phenomenon* in space are nothing but relations, and it is itself nothing but a complex of mere relations. For we know it only by forces which are active in it, either to attract other substances or to prevent other substances from penetrating it." [2] In other words, Kant opposes the merely relative determination of phenomenal substances, to that absolute determination of them which is demanded by pure thought; and he finds in the form of space, under which phenomena are given to us, the reason why thought can determine objects only in relation to each other, so that the permanence which we attribute to them as substances, is only the permanence of certain relations.

[1] A. 186; B. 229. [2] A. 265; B. 321.

Conversely, if we could determine objects in pure thought, (which would be necessary if we were to determine them as things in themselves,) we should determine them purely by predicates "which involve no reference of them as regards their existence to anything different from themselves." Here, therefore, we have another reappearance of the analytic idea of thought in contrast with the synthetic idea of knowledge, and further the condemnation of the latter as phenomenal, just because it is synthetic. Kant thinks that we do not know objects as things in themselves, because we do not find an inner being in them, apart from their actual determination in relation to other things. And this means that it is only the connexion of phenomena, *i.e.*, of our ideas, with each other according to necessary laws, which makes us refer them to permanent objects distinct from our perceptions. We have no consciousness of the object as a permanent substance apart from our consciousness of the causal, or reciprocally causal, connexions of phenomena. And it is just this fact which we discover when we ask what is meant by the existence of an object for us, *i.e.*, when transcendental reflexion forces us, in the determination of objects, to take account of the self for which they are. In other words, when reflecting on the conditions under which permanent objects come to exist for us, we see that they can do so only as the phenomena referred to them form part of a context of experience determined by universal laws, and that the "object itself," the "transcendental object," is nothing apart from that context—though, prior to the transcendental reflexion, we naturally regard it as something which exists in itself, and is revealed to us as so existing.[1] If, however, it were so revealed to us, we should be able to determine it in itself, by predicates which did not involve its relations to other things and their predicates. But, just because we know things only in their relations to each other, we must say that the things we know are only phenomenal, only existences for the self, and not real things independent of it.[2]

[1] A. 104.

[2] B. 67. "Now, through mere relations a thing in itself is not known; wherefore we may fairly judge that, as by our external sense nothing but idea

Defects of this view due to Kant's conception of thought as purely analytic.

Now, how should all this be interpreted from the point of view which has been taken in our previous criticism of Kant, *i.e.*, if we reject his view of the analytic movement of thought, and with it the conception of the regress on self-consciousness as being a regress upon that which is more abstract and simple than the experience it explains? The ordinary consciousness, no doubt, takes objects as things in themselves, and that in two senses. It takes them as things which are determined in themselves, apart from relations to other things and from the changing predicates which they receive from such relations; and it also takes them as things which have their determination apart altogether from their relation to the conscious self. Hence to it the demonstration, that the object has no determination for us apart from its relations to other things, and that these relations are continually changing, would seem to be the denial that we have any

of relation are given to us, that sense cannot contain anything but the relation of an object to the subject, and not any inner determinations which belong to the object in itself." A. 284; B. 240. "Through mere conceptions, it is true, I cannot think of anything external without something internal, just because conceptions of relations necessarily presuppose given things, and are not possible without them. But in our perception of objects something is contained which does not lie in the mere conception of a thing, and it is this which supplies the substratum which could not be known through mere conceptions, to wit, a space which, with all it contains, consists of mere relations—formal, or it may be also real, relations. It is, therefore, impossible for me to argue that, because nothing can be represented by mere conceptions without something absolutely internal, the same must be the case with the things which fall under such conceptions, and that in the perception of these things there can be nothing external without something absolutely internal beneath it." Here we have, on the one hand, the necessity of pure thought, which arises out of the nature of judgment in so far as any object is supposed to be determined by it, *i.e.* the necessity of separating the object of *thought* from its predicates and regarding it as something simple and primary, something determined in itself, to which they are attached; and, on the other hand, the idea that as *perception* with us takes the place of the subject, in the judgment of knowledge, and as the form of perception is essentially a form of relation between elements which are different and external to each other, so *our* object can only be a substratum or permanent possibility of certain relations. But, it might be asked, how should pure thought take the form of judgment, and so give rise to the duality of subject and predicate, which, again, interpreted ontologically, passes into the duality of substance and accident here referred to? This, as we have seen, is a difficulty for which Kant's view of pure thought provides no solution (see above, p. 416). No answer can be given, except that pure thought is taken by Kant as *already* judgment, which it could not be if it were not in some sense synthetic.

real knowledge of the object at all. Now, Kant at once vindicates and gives a new sense to the ordinary consciousness of phenomena as objective, when he shows that the permanence attributed to them as objects is not the permanence of things as determined by predicates which are independent of their relations, but the permanence of the laws of relation which maintain themselves in all the changes of the special determinations of objects; a permanence which itself presupposes the permanence of the objects related, though only as terms in such relations. But, while Kant thus advances to the idea of objects as determined only in relation to each other, or as subjects of relations, he treats the demand of the ordinary consciousness for a non-relative determination of things as, from the point of view of thought, a legitimate demand, a demand that arises from the very nature of the intelligence; and he regards the fact that we are confined to a relative determination of things as a result of the mediation of our knowledge by sense and its forms. Because objects can exist for us only as we combine or relate to each other the perceptions or phenomena through which we know them, it is maintained that we cannot know them as they are: though the universality of the forms of synthesis explains why we *suppose* that we do know them as they are, independently of our perceptions. Hence, the relativity of the objects to each other is immediately connected with their relativity to the subject, and this relativity to the subject is opposed to their reality as things in themselves.

But the idea of a thing in itself apart from relations is due to the abstract nature of our first consciousness of things.

Now, it is undoubtedly true that our consciousness of objects cannot be logically separated from a consciousness of their relations; and that a consciousness of the permanence of the objects in the change of their relations, cannot logically be separated from a consciousness of the permanence of the laws of relation in all the change of the determinations of the objects. But, to suppose that the recognition of this relativity of the objects of our knowledge is equivalent to the denial of the real objectivity of the things so determined, would imply that we have some idea of real objects or things in themselves as divested of such relations. It would imply that we can

at least *think*, if we cannot *know*, an object absolutely out of all relation. But where are we to get such an idea?[1] That we ever think we have it, is a result of the imperfection of that self-consciousness which goes along with our first consciousness of objects. But, in fact, so far is it from being true that we can or must think any object as in itself unrelated, that on the contrary we are unable to think of it except as related. And our recognition of relations as implied in our thought of an object is, therefore, merely a step to correct that thought by completing it. Again, it is equally true that the consciousness of the object as essentially related to other objects,—or, in other words, the consciousness that it is knowable only as its phenomena are connected in one context of experience with the phenomena of all other objects,—implies and leads to the consciousness that it is essentially an existence *for a self*. But, when Kant regards this recognition of the relativity of objects to the self as reducing them to mere phenomena, behind which things in themselves are impenetrably concealed, we are obliged to point out that the relation of objects to the self,—the very relation implied in speaking of things as objects,—cannot involve the negation of their claim to be objects in distinction from the subject. This Kant himself shows us, when he points out that the consciousness of self is possible only as the self is distinguished from, and related to, the object. For we need only to remember that a self, strictly speaking, does not exist except as self-conscious, in order to see that a denial of the reality of the object is also a denial of the reality of the self for which it is. To say that the permanent object exists merely in the determination of the connexion of our experiences by universal laws of causality and reciprocity, may convey a truth, if it teaches us not to isolate one element in the determination of the object from another, or the determination of the object from its relation to the self. But it is misleading, in so far as it suggests the idea that the object is a determination of a merely subjective consciousness which

[1] Thought, according to Kant himself, is essentially judgment; and, as such, it is at once the reference of an object to itself and its relative determination by a predicate which distinguishes it from, and connects it with, other objects.

knows only its own states. For, if we can have no consciousness of the self except in distinction from and relation to the object, we may, indeed, say that the consciousness of self includes the consciousness of the object and goes beyond it, but we are not at liberty to speak of the latter as a mere state of the former. Otherwise we fall into the old confusion of the return upon the self, which implies and presupposes its distinction from the object, with a regress upon a subject for which there is as yet no object, and which therefore is not for itself a subject of knowledge, *i.e.*, is not, properly speaking, a self at all.

But, instead of going back on a noumenal substance apart from relation, we should correct our first conception by following out the other forms of relation.

The result, then, is that Kant is right in saying that the recognition of the permanent identity of the object through all its changes is necessary, as the first determination of an object in relation to, and in distinction from, which we can be conscious of self. But, as it is in relation to the subject that objects in space and time are determined as objects, we must, in a sense, regard their permanence as phenomenal; *i.e.*, we must regard the permanence of matter in its occupation of space as not belonging to it, so to speak, in its own right, but as the necessary attribute of the object of consciousness as such. But as the self-externality of the object is not its externality *to* consciousness, and its occupation of space is not exclusive *of* consciousness, so when we realise the relation of the object to consciousness, we see that those attributes given to the object in abstraction from the subject, must be reinterpreted by that relation. In this sense, we may say that the permanence of the material world is the analogon of the self-identity of thought, which in every object presented to it must seek and find its own product or manifestation. The defect, however, in the scientific conception of the objective world, as a permanent matter which in all its relative motions never ceases to maintain its occupation of space, lies in this, that it takes the object in its externality and difference as ultimate, and only so far makes it intelligible as it represents the same identical whole as maintaining itself in all changes of its parts. But, in this there is a double contradiction; for (1) that is taken as a whole which cannot be conceived as a whole, because no principle of unity in its difference is seen; and

therefore also, (2) the relative change of the parts is taken as something which is inexplicable from the identity of the whole, which it presupposes. In other words, matter, conceived as a thing in itself, wants at once a principle from which the differences of the object could be conceived as flowing and a principle to which they could be conceived as returning. The same difficulty, *mutatis mutandis,* is to be found in the category of substance itself, in so far as the application of that category implies the reference of phenomena as transitory accidents to a permanent substratum, which yet has no determination apart from these transitory accidents which are its correlate. While, therefore, that category carries our view beyond the transitory, and while in the substance we *suppose* ourselves to find something more than in the accidents, yet we *do* find in it only a unity which turns into the totality of the accidents. This dialectic we find in the system of Spinoza, whose substance, in which all finite parts are lost, immediately converts itself into a sum of finite parts or modes. Kant's use of the category does not betray the same contradiction so clearly; for while he tells us that "only the permanent changes," he does not go on to say that only the changing is permanent, but takes change as the fact from which we may go back to the permanent. And the necessary correction of the contradiction involved in the category with which he begins, appears only in the addition of other categories to it. We can, however, understand the progress of his thought only if we regard the first of the Analogies as an imperfect expression of a truth which is restated in a corrected form in the second and third Analogies; and, as we have seen, Kant himself indicates this, when he speaks of the first Analogy as merely the presupposition of the others.[1] This result, however, we shall be able to reach in a satisfactory way only when we have considered Kant's method of proving these Analogies.

The Principle of Causality as stated in the first and second editions.

The second Analogy, in the first edition of the *Critique,* is entitled "The Principle of Production," and the formula in which it is expressed is:—"All that happens (begins

[1] Also when he speaks of the third Category in each class as including the other two. (B. 111.)

to be) presupposes something upon which it follows according to a rule." In the second edition the title given is, "The Principle of Time-sequence according to the Law of Causality," and the formula given is:—"All changes take place according to the law of the connexion of cause and effect." The second formula has the advantage of separating the category from the fact to which it is applied, and bringing, therefore, the idea of the subsumption of the latter under the former more distinctly before us. Kant begins his proof by calling our attention to the fact that the previous principle has already excluded the idea of absolute change, *i.e.*, of any change which involves the extinction of one substance, and the beginning to be of another. Changes can be known only as alterations in the special determinations or accidents of a permanent substance. In fact, they can, according to Kant's principles, only be relative alterations of the parts of a whole which is presupposed to be unchangeable—as unchangeable as the self for which it is.[1] Presupposing then such unchangeable reality, Kant goes on to argue that the successive phases of it must be determined by the law of causality, on the ground that a change can be known as such only if it be connected according to the law of causality with a previous change.

Relation of this statement to Hume's view.

The statement of the question in this way, as we have seen, already involves a partial answer to Hume; as it brings to light the distinction between the consciousness of a real or objective succession, and the consciousness of our perceptions as successive—the former being a consciousness of a succession in the permanent object, the latter merely of the successive synthesis of apprehension involved in all consciousness of the object whatsoever, whether the manifold of the object be determined as coexistent or successive. In both cases equally there is a subjective succession of ideas, and a synthesis of these ideas in which they are successively taken up and combined in the consciousness of an object. Now, even if we could suppose that we were conscious of such successive

[1] The self is unchangeable as the subject of knowledge. This does not, of course, affect the question of the permanence of the soul—a question which Kant afterwards discusses in the chapter on the *Paralogisms of Rational Psychology*.

synthesis apart from any determination of an object by it, it would not be of itself the consciousness of a succession in the objects. This we see if we consider, (1) that succession in the object is only one of the determinations of the object, and that it must be distinguished from all the other determinations of it, though these equally imply a successive synthesis; and (2) that it immediately presupposes the determination of the objects as permanent, a determination which could not be transferred to it from the synthesis of apprehension, which is always successive.

Succession ot perceptions does not yield objective succession any more than it yields objective co-existence or permanence.

Now, Kant goes on, there can be no doubt that we do make the distinction between real succession and coexistence. We recognise that the succession in our apprehension of the manifold of a ship floating down a stream, corresponds to a succession in the object; while we as certainly recognise that the succession in the apprehension of the manifold of a house, does not correspond to any such succession. If, however, the determination of the succession in the object were derived simply from the consciousness of the succession of our perception, such a distinction would be impossible. Either the manifold would in all cases be combined as successive in the object, or it would not be referred to the object at all: *i.e.*, we should be conscious merely of a succession in our apprehensions. To generalise Hume's theory is, therefore, fatal to it; for he seeks to derive one particular determination of objects from a consciousness of that succession of our apprehensions which is involved in *all* determination of objects. On the other hand, if in Hume's method we are to derive from the successive synthesis of apprehension the determination of objects as permanent, as changing, and as coexistent, we must get them all equally out of the subjective succession of our states; and we must be able to show how an association of perceptions, that we are conscious of only as continually changing, can generate a consciousness of permanent objects, which (1) do not pass away with the perceptions, but (2) pass through different states, which states again are (3) determined both as successive to, and as contemporaneous with certain other states previously presented to us. Now, for Hume as for Kant, the way to objectivity lay through

necessity; for both had given up the idea that we are directly conscious of things in themselves and can from them read off their qualities and relations. What we are immediately conscious of is only, as Hume contends, the succession of perceptions which change upon us every moment. Hence, it is only in so far as we come to recognise between such perceptions a necessity of relation, which determines their succession in our consciousness and is not determined by it, that we refer them to objects. But Hume regards this necessity as itself generated by custom, which establishes an inseparable connexion between perceptions that have frequently followed each other. When such connexion has been established, so that the presence of the one perception necessarily brings the idea of the other as its consequent, we refer the connexion to the object and regard our perceptions as corresponding to something which is independent of them. Now, Kant goes along with Hume, in so far as he holds that the determination of a sequence as objective *means* the determination of it as connected with a perception which precedes it according to a universal rule,—means, in short, that the consequent is necessarily connected with the antecedent. But he rejects Hume's explanation of the way in which their connexion is established for us; and he proves the inadequacy of that explanation by showing that it will not bear the weight which must be thrown upon it, if it is to be used as a general explanation of objectivity. It looks plausible to say that a necessary connexion of perceptions as successive can be established between them when they are repeatedly given as successive, and that when this consciousness of them as necessarily sequent is established, we regard them as objectively sequent. But, as the perceptions are always successive, it is obvious that causality or necessary sequence, on this hypothesis, should be the only principle of objective connexion, and that we should never connect objects or their states as coexistent: nor, again, should we refer perceptions to objects which are permanent while the perceptions change. The plausibility of Hume's whole explanation lay in the fact that, while he appears to get objectivity out of necessity, he really assumes, to begin with, that our

successive perceptions are perceptions of changes in permanent objects, and not merely successive perceptions, of which one disappears when the other comes. Such perception, (even if we admit the possibility of the genesis of a consciousness of necessity of succession out of a consciousness of repeated succession) could produce only the consciousness of a connexion of different objects or perceptions, as necessarily presented in succession. But if Hume had assumed, to begin with, the consciousness of changes in objects, he had already assumed that very objective connexion of sequence which he had to explain as an inseparable association generated by custom.

Objects are not perceived by us as changing except through the synthesis of imagination and the recognition of its principle;

Kant's proof, then, begins by the rejection of any explanation of the consciousness of real or objective sequence which assumes that changing objects are perceived by us. The object exists for us only *through* our own "ideas" and *in* them: we may even say that it *is* only an idea. But, nevertheless, it is quite true that "our thought of the reference of knowledge to its object carries with it something of necessity; for the object is regarded as that which hinders the elements of our knowledge of it from coming upon us pell mell and at haphazard, and causes them to be determined *a priori* in certain ways. For, just in so far as our ideas are to refer to an object, they must necessarily agree with each other in reference to it, *i.e.*, they must have that unity which constitutes the conception of an object."[1] Now, when we are asking for the origin of this necessity, this constraint upon our ideas, it is no answer to say that we determine the object so, because it is so determined in itself. With the thing in itself we have nothing to do; nor can it constrain us to combine the manifold of our perceptions in any particular way. The thing in itself is, no doubt, the ground to which we refer the affections of sense, "in order that we may have something which corresponds to the sensibility as a receptivity."[2] But these affections become part of a consciousness of objects, not as they are given, but in virtue of a synthesis of imagination, which takes up the given matter so as to combine it into images. Now, no doubt, this process is successive; but it does not

[1] A. 104. [2] A. 494; B. 522.

explain a consciousness of succession in the object so imaged or apprehended, any more than it explains a consciousness of its permanence, or of the coexistence of its parts with each other. In all cases, therefore, we have to look for a principle that determines the mind to put the manifold together in a particular way in the objects, a principle which is not given in the succession in which the elements of perception are taken up by imagination; and this principle is not less required in the case where the states of objects are determined as successive, in correspondence with that succession, than in the case where they are determined as coexistent and therefore not in correspondence therewith. For, "we take that which lies in our successive apprehension to be mere ideas, while we regard the phenomenon which is given to us through them as the object of these ideas, with which the conception we draw from the ideas of apprehension is required to agree: though in truth the object in question is nothing but those very ideas as a complex unity."[1] Now, Kant goes on to say, this twofold consciousness of our ideas, as successive states of our subjectivity, and as representing states of objects which may or may not be successive, can be accounted for only in one way. "A phenomenon can be set over against the ideas of apprehension as corresponding to them, and yet contrasted with them as their object, only if it stands under a rule which separates it from every other apprehension and which makes a special way of connecting its manifold necessary." What, then, is the rule to which we must subject the perceptions in this case, in order that we may conceive them not merely as subjectively successive (which they always are), but as representing a succession of states in an object?

and that principle is causality.

Now, Kant contends that no answer can be given to this question which does not involve the principle of causality. I can say that a subjective succession of perceptions corresponds to an objective succession of events, or, in other words, I can determine the subjective succession in my apprehension as representing a change in the states of an object, only in so far as I presuppose or

[1] A. 191; B. 236.

discover that, in the moment when the change began, some phenomenon had come into existence which is the "condition of a rule" according to which the second perception must always follow upon the first. Or, in other words, I regard the succession of perceptions as representing an event or change in a substance, in so far as I regard such event as referring back to some other event as its necessary correlate. And, conversely, in so far as we do not refer back a succession in our perceptions to an event or change in the previous time as its necessary correlate, we do not regard it as itself representing an objective succession or event. In this latter case, the "coming to be" of the new perception for me is not regarded as the objective "coming to be" of the state of a substance which it represents; *i.e.*, I regard the sequence as merely subjective, or as not representing an objective sequence, though the synthesis of phenomena or sequents in my perception may represent some other objective relation. The new perception always drives out the old in my apprehension; but I can fix the succession as necessary and objective only so far as I regard it as determined in relation to a phenomenon in the previous time, which may or may not actually have been perceived, but which in any case I regard as making the order of my perceptions necessary. And if I did not regard the change of my perceptions as having such a necessary correlate, I should not regard it as representing a change in an object.

By this principle the imagination is bound to a definite order in the perception of an event as such.

Kant expresses this thought as follows:—"In all empirical knowledge there is a synthesis of the manifold by imagination, and this synthesis is always successive." In other words, in whatever way I determine the manifold so as to unite it in the conception of an object, I must always take up one element of it after another. But this, Kant goes on to say, does not determine how I shall conceive of the order in the object, which imagination might (as far as this sequence is concerned) make what it pleases. For the elements which I put together one after another, I may take as representing what stands in the reverse order in the object. Suppose, however, that the synthesis is a synthesis in which I apprehend an event

or objective succession, then "the order is determined in the object; or, to put it more accurately, there is in it an order of successive synthesis which determines an object, so that something must necessarily precede, and when this is posited, something else must necessarily follow. The perception of an event, therefore, involves an empiric judgment in which we think of a sequence as determined, *i.e.*, as presupposing another phenomenon as previous in time, on which it must necessarily follow according to a rule. And if, on the contrary, I were to posit the antecedent, and the event were not to follow necessarily upon it, I should be obliged to regard it as a subjective play of my imagination, and if I still held it to represent anything objective, I should call it a mere dream."[1] In other words, the condition on which I regard a particular succession of any perceptions as representing a change in the objective world, is that I regard it as a link in a chain of successive changes, each of which contains in it the necessity of the subsequent link, just as in time itself each moment contains the necessity of the following moment.[2] And if, on this principle, I had objectified a succession of my perceptions by connecting it with some antecedent on which I regarded it as a necessary consequent, and then found that when the antecedent was posited, the consequent did not follow, I should immediately think myself to have been dreaming. For it is just this thoroughgoing connexion of phenomena according to rules, which constitutes that objective reality in relation to which alone we can be conscious of ourselves. Kant's statement is only so far imperfect as the recognition of an event as a dream is only the reference of it to a different place in the context of experience; whereas in the clause, "if I still held it to represent anything objective," he seems to mean that apart from the reference of successions of phenomena to definite correlates in the preceding time, we should not be conscious of them as events at all. In other words, just as an object would not be distinguished from a perception, unless it were conceived to be per-

[1] A. 201; B. 243.

[2] These, indeed, are not two separate things, for it is, indeed, through the objective succession of events that the succession of times is determined for us.

manent while the perception changes, so a change would not be distinguished from a succession of perceptions, unless it were regarded as determined in relation to previous changes. Kant would have expressed his meaning better, if he had said that a change not regarded as a link in the chain of connected changes, would be to us as a dream; and that if antecedents did not bring with them definite consequents, experience as a consciousness of objects in time could not exist; for "it is only as a certain order in the time-relations of our ideas is necessary, that objective significance can be attributed to them," and apart from such determination, "we should have a play of ideas which referred itself to no object, *i.e.*, our perception would not enable us to distinguish one phenomenon from another as respects its time-relation."

The idea of causality can be derived from phenomena only because the understanding has previously determined them by it.

Now, as such a determination of phenomena cannot be given to us in sense, nor in the mere imaginative synthesis of sense-data, it must be derived from the understanding, as one of the conditions under which we bring the data of sense in that determination of them as objects, which is necessary to their being brought into relation to the "I think." This, indeed, "seems to contradict all the observations usually made as to the conduct of our understanding. For the view usually taken is that it is the sequence of many phenomena which have been observed, compared and found to agree, which first guides us to the discovery of a rule according to which certain events always follow upon certain phenomena, and that it is only as a result of this experience that we are led to form the conception of a cause. If that were the case, the idea of cause would be empirical, and the rule of causality as accidental as the experiences from which it is derived; and its necessity and universality would be altogether fictitious." In truth, however, "it is in this case exactly as in the case of other pure *a priori* ideas (*e.g.*, space and time), which we can extract as clear conceptions out of experience only because we have ourselves put them into experience, and thereby brought experience into existence."[1] It is true that it is only after we have made use of the conception in experience that we can give it "logical

[1] A. 196; B. 241.

clearness," *i.e.*, that we can be conscious of it for itself as a general principle; but " a reference to it as a condition of the synthetic unity of phenomena in time, is the ground of experience itself, and anticipates it as an *a priori* condition."

Elements of the Deduction.

These two points, then, are to be firmly kept in view: first, that " I never refer sequence to the object and distinguish it from the subjective sequence of our apprehension, except on the basis of a rule which compels me to observe that order of perceptions rather than another, and that indeed it is this necessity which first makes the idea of succession in the object possible" ; and, secondly, that this rule is not given in the sense, nor in the imaginative synthesis of sense-data, except in so far as the latter is determined in relation to the unity of apperception, which expresses itself in the category of causality. But then the imaginative synthesis *must* be so determined in order that the consciousness of events as happening may be possible; or, what is the same thing, in order that the perception of such events may be capable of being united with the consciousness of self.

Double aspect of it. (1) Causality is not to be got by analysis from the idea of an event.

We must remember always the conditions of proof or deduction according to the transcendental method. We have to deduce this, like the other principles of pure understanding, " not directly from conceptions, but indirectly through the reference of these conceptions to something which is itself quite contingent, viz., possible experience. For if this (*i.e.*, something as an object of possible experience) be presupposed, the principles of pure understanding can be shown to be apodictically certain; whereas if we take them by themselves (directly) it is impossible *a priori* to know anything about them. Thus, no one can discover a basis for the principle that everything that happens has a cause, by means of those conceptions alone. . . . But, though it needs proof, it is not to be called a dogma, but rather a principle; because it has the strange peculiarity that it makes possible the very experience which is its own ground of proof and in such experience requires always to be presupposed."[1] In other words, if we take the conception of an event by itself, no analysis

[1] A. 737; B. 765.

of that conception will enable us to discover the necessity of relating it to a previous event as its cause. If, however, we consider how it is possible for us to come to the knowledge of it, or, in other words, how it is to be brought into relation to the "I think," we see that the mere fact that the event happens will not enable me to be conscious of it as happening. An event, as a change in an object, can be known to me through my perceptions, which in themselves are merely successive states of my consciousness, only in so far as my imagination retains and connects them according to universal rules of determination; and in this case the rules in question must express, (1) the reference of these states as successive to a permanent object; and (2) the conception of such succession as a link in a series of changes, each of which is determined in relation to a previous change. Only in so far as imagination is determined in its synthesis by such rules, and in so far as we become conscious of it as so determined, can we "recognise" the successively apprehended data of sense as representing to us an objective change and not as a mere sequence in our perceptions.

(2) But an event cannot be known to us except through the principle of causality.

Explanation of the apparent contradictions in this proof.

The difficulty of understanding this view arises, as usual, from the twofold aspect of the judgment of knowledge, in which, as we must always remember, subject and predicate are not elements given apart and brought together without change, but in which each gets the character it has in the judgment only through the relation to the other into which the judgment brings it. If we forget this, the judgment becomes unnecessary or impossible; unnecessary, if the subject already has the character which it gets as subsumed under the predicate, and impossible if it has not. In truth, what Kant shows is not that a change, perceived as such, can be brought under the principle of causality, but that, if we take from the perceived change the characteristics which we give to it in recognising it as an effect, we reduce it to a mere sequence of perceptions which we could not recognise as representing a change, or, indeed, as representing anything. It is in relation to the unity of apperception which expresses itself in the category of causality that a succession of perceptions can alone be determined as a change. On

the other hand, it is only in relation to the determination of the object as changing, that the category, which corresponds to the relation of reason and consequent in the hypothetical judgment, becomes schematised as a relation of invariable succession. Apart from their relation in the judgment of experience, in fact, the subject would be a mere succession of perceptions, and the predicate would be a mere relation of the factors in an analytical judgment of pure thought. The main ambiguity that remains is that which arises from the way in which Kant, as it were, substantiates perception and conception in their independence, and refuses to recognise that they are merely abstract elements which are nothing apart from their unity. Hence, especially, he seems here to admit that the sequence of perceptions as combined by imagination is something of which we can be conscious for itself, apart from any determination of it by conceptions. It is, however, obvious that, on Kant's own principles, the consciousness of nature as an ordered system, in which all the elements are determined as in necessary relation to each other, is the necessary correlate of the consciousness of the unity of the self; and that the consciousness of the unity of the self; and that the consciousness of the successive process, by which this consciousness of an objective world is developed *ex parte nostra*, implies a reflexion which cannot precede the process itself.[1]

Special difficulty as to the category of causality.

It is, however, necessary at this point to notice a certain want of adjustment between the category and the perception subsumed under it, which makes the argument of Kant more difficult to interpret in the case of the category of causality than in the case of the category of substance. According to Kant, the (analytic) relation of reason and consequent is schematised in relation to time as the (synthetic) relation of essentially different phenomena which, though quite distinct, are yet necessarily connected in our experience. In this way Kant meets the double objection to the category of causality, the objection (which he had encountered as early as the *Essay towards the Introduction of the Idea of Negative Quantity into Philosophy*), that pure thought cannot explain change, and

[1] B. 155.

the objection suggested by Hume, that sense when it presents us with different successive phenomena does not enable us to establish any necessary relation between them. Kant seeks to meet the difficulty by the idea that thought in relation to sense is brought into contact with the changing series of phenomena, and that between the different successive links it establishes a necessary relation, which is analogous to the identical relation of reason and consequent in pure thought. This necessity of relation between phenomena (events) that are different, is the nearest *analogon* to the pure analytic relation of thought in the hypothetical judgment.

It is due partly to Kant's absolute distinction between analytic and synthetic judgment,

Now, it is easy to see that this way of stating the matter gives rise to great difficulty, just because Kant conceives that, on the one side, there is the mere difference of sense, and on the other side the transparent unity of thought; or, to put it more definitely, that on the same side, we have an analytic connexion of thought, such as is expressed in the proposition, "If man is immortal, he cannot die," and on the other side, a succession of events like the appearance of a flame and the sensation of heat, between which there seems to be no more necessity of connexion than between day and night. And Kant's answer—that the identity of thought broken in relation to difference of phenomena in time, yet so far recovers itself as to establish necessary relations between them, and so alone determines their succession as objective—seems forced and artificial; because, in this connexion at least, he seems to look for no identity continuing itself through the different events that are thus brought together as necessarily related; and therefore their necessary relation appears to be a kind of miracle operated upon them by thought. We have, however, to observe, that Kant is led thus to omit reference to the identity that maintains itself through change, partly because he has made, as he thinks, sufficient provision for it in the principle of substance. The imperfection of Kant's statement lies mainly in the sharp way in which he has distinguished the identity of the substance and the necessity of connexion between the changing states, as if the latter were not just the expression of the former. For in this way, the relation of cause and effect seems to

and partly to his separate treatment of the principles of substance and causality.

be externally superadded to the relation of substance and accident, the former being the relation of the permanent to its successive states, while the latter is the relation of these states to each other. But when the identity is thus left on one side, the relation of the successive states can appear only as a succession of qualitatively distinguished phenomena, between which no intelligible connexion can be discerned. Kant, however, when he declares that the permanence of substance is *merely* the presupposition of the other analogies, points to the truth that the category of causality is not simply an addition to the category of substance, but that it is a higher form of the same idea. In fact, science passes from the category of substance to that of causality whenever reflexion has been carried so far as to see that what is wanted to explain phenomena is to discover not merely an identity *under* their difference, but an identity *in* their difference. And Kant again suggests the same idea when he insists on the *continuity* of change; for such continuity is inconsistent with the thought of any qualitative break between cause and effect, and makes us rather think of a process of transformation, in which an identity manifests itself and maintains itself in continual change.

Relation of causality to substance.

In truth, as the categories are different phases of one thought, it is impossible to work with more than one category at a time; and the point of view expressed in the category of causality excludes the point of view expressed in the category of substance, just because it contains and goes beyond it. It is the product of a more advanced reflexion, which brings the identity of substance into unity with the difference of the accidents, and views it as an identity which continually goes beyond itself; in fact, it is just the notion which Kant found so paradoxical in his early essay, that the position or assertion of one thing is at the same time the position or assertion of something different from it. A cause is just an identity which is regarded as revealing itself in transition to another, which, however, is "not another"; for the identity is regarded as still expressing itself in it. From this point of view, we can understand why such opposite and apparently contradictory things should be capable of

being said of the relation of cause and effect; why, from one point of view, the cause should be regarded as necessarily other than its effect, while, from another point of view, it is thought of as identical with it. For that which is thought of as a cause, is thought of as manifesting itself only as it goes beyond itself, while yet it is regarded as passing into and reproducing itself in the effect. Hence, we are never satisfied till we have resolved the effect into a cause which is the unity of all its conditions, a unity which means just the effect analysed. Yet, on the other hand, the difference of cause and effect returns upon us, in so far as we are analysing a process in which the elements of the cause are disengaged from one connexion to reappear in another; and the difficulty thus suggested finds its proximate solution in the category of reciprocity.

Kant's difficulty in relation to causality as arising from his view of pure thought.

Leaving this last point for the present, we may observe that the fundamental error of Kant lay in his partial acceptance of the principle of Hume, "that no idea or object considered in itself, can give a reason for drawing a conclusion beyond it;" *i.e.*, his acceptance of this principle as true for pure thought, though not true for thought as schematised. In fact, as we have seen, if this view of thought were true, judgment, even analytical judgment, would be impossible; or, admitting its possibility, it would be confined to simple position and negation—position as the assertion of a thing as identical with itself, and negation as the exclusion of all difference from it—and from this we could at the utmost derive only the categories of quality and quantity. For, in the categories of relation the ideas of identity and difference, position and negation, are brought together and viewed as correlative aspects of the same thing. The simplest form of such relative conception is the idea of substance, *i.e.*, the idea of a unity in which the difference of the accidents continually disappears, but which yet is determined only in relation to its accidents. Hence, we necessarily think of it as continually reproducing the accidents, which as continually disappear in it. This idea of the reproduction of the differences out of the unity is, however, only latent in the category of substance. It is a second thought which comes to us when we realise that the substance, which we at first

contrast with its accidents as reality with appearance, is after all nothing except in relation to its accidents. When this second thought is emphasised or becomes explicit, we pass from the category of substance to that of causality; *i.e.*, we get the idea of an identity which is negatively related to itself, or which manifests itself in going beyond itself and positing something other than itself; we get, in fact, the very idea which caused Kant so much difficulty in his early essay. And the other difficulty specially suggested by Hume, *i.e.*, the difficulty of establishing a connexion between phenomena given as different, is just the counterpart of this; for a thought which cannot go *beyond* its own identity, cannot bring back *into* its identity the phenomena which are given in difference. On the other hand, if we say that there is no possibility of isolating a thought so that it is cut off from relation, (for even in our utmost abstraction we cannot destroy the relativity of a conception to that from which we abstract, and indeed the effort of abstraction only makes the relativity more manifest,) we take away the ground for the opposition of thought and perception, and the necessity for the elaborate mediation between them, which Kant has contrived. Thus, the principle of reason and consequent ceases to be distinguished from the principle of causality; and the latter takes its place, not, indeed, as an absolute principle, but as one of the principles by which the objective world must be determined, in the process of bringing it into relation to the unity of apperception.

Schopenhauer's objection to Kant's view of the relation of succession to causality.

I have already said that the proximate solution of the contradiction involved in the principle of causality is to be found in the principle of reciprocity, into which it passes, when that which is latent in it is brought to light. The principle of substance emphasises the reality of the identity of the object as maintaining itself in change; the principle of causality emphasises the reality of the difference of the forms in which the identity shows itself; but the category of reciprocity brings both together, in the idea of a changing relation of substances which through it maintain their unchanging identity. Now, we may best understand the necessity of this transition, and the way in which Kant expresses it, if we consider a special difficulty which has

been raised, in connexion with Kant's deduction of the principle of causality. Schopenhauer, in his criticism of the *Critique,* argues that Kant's deduction would really prove too much; for it would involve that all objective sequence is causal, and that, therefore, any event must be the cause of any other perceived after it, *e.g.*, night and day must be causes of each other. Now, to this a good answer can be made entirely from the point of view of the deduction itself. Kant is showing, not that objective succession is always causal, but that the determination of a succession of perceptions as referring to a succession of states in an object, involves the principle of causality. If Kant had meant to assert that all succession is necessarily causal, he would have said what is obviously absurd, and what could easily be refuted by his own illustration; for the successive positions of the ship going down the stream cannot be said to be causes and effects of each other; though, no doubt, if we take all the conditions under which the ship is placed in its successive positions, we can discover a complete chain of causality between them, and Kant would be prepared to argue that such a succession of positions cannot be referred to the boat as an object, without aid from the principle of causality. For what he contends is, that there is no recognition of a succession of states as in an object, which does not imply a recognition that such succession is determined by a rule which is independent of any perception. Day follows night and night follows day without either being the cause of the other; but if we consider what are the changes in the relations of the earth to the sun, we can find in the circumstances of the earth at each point of time the cause of the transition towards light or darkness through which it is passing. And the supposition that we can do so is bound up with the recognition of the successive perception of light and darkness as an objective change of the earth's state. In other words, the recognition of a sequence of ideas as representing an objective change *is* the recognition of that sequence as a link in a chain of changes which is determined by a general rule of possible perception, and not merely a sequence of states in the experience of an individual.

Stadler's answer to this objection.

"When Schopenhauer adduces the sequence of musical notes or of day and night, as objective sequences which can be known without the causal law, we need only meet him with the question, Where in these cases is the substance that changes? So soon as he is forced to put his objection into the form required to bring it into relation to the question of the possibility of knowledge, his error becomes obvious. His instances must then be expressed thus:—The instrument passes from one state of sound into another; the earth changes from the measure of enlightenment which makes day, to that which makes night. Of such changes no one will say that they are not referred to a cause. And we may quote in this reference the appropriate saying of Kant himself, 'Days are, as it were, the children of Time, since the following day with that which it contains is the product of the previous day.'"

How causal sequence is to be explained on Kantian principles.

"Another objection of Schopenhauer is not unimportant and deserves to be mentioned. He points out that that which we call chance is just a sequence of events which do not stand in causal connexion. 'I come out of the house and a tile falls from the roof which strikes me; in such a case there is no causal connexion between the falling of the tile and my coming out of the house, yet the succession of these two events is objectively determined in my apprehension of them.' How have we to criticise this case from the transcendental point of view? We know that successions become necessary, *i.e.*, objective, for our consciousness, when we regard them as changes of a substance which are determined by a cause. But it is shown here that there are successions in which the single members are changes of different substances. If substance S changes its state A into B on account of the cause X, and substance S′ changes its state A′ into B′ on account of the cause X′, and if I call the first change V and the second V′, the question arises how the objectivity of the succession VV′ is related to the law of causality. Sequences such as VV′ are very frequent, and our consciousness of the objectivity is certain. Do we owe this consciousness to the same rule as holds good in the other cases?"

"Certainly. The distinction is not qualitative, but rests only on the greater complication of the change in question.

The sequence VV′ can become objective only if I think it as a necessary connexion. It must be so determined that V can only follow V′ in 'consciousness in general'; there must be a U, the introduction of which is the cause that V′ follows V. To be convinced of this, I do not need actually to know U. I know that on every occasion U causes the succession VV′. Of course, this presupposes that all data of the states considered, A and A′, remain identical. But whether these data are very simple or endlessly complex, whether they are likely to combine to the given result frequently or seldom, is indifferent for the objectifying of the event;[1] it is not the perception of U, but the presupposition of it, which makes the change necessary and so objective for us."

Further objection to Kant's first general statement of causality. Is it to be taken as directly applying to inner experience?

A good answer may thus be given to the objection of Schopenhauer from the point of view of Kant. At the same time, it should be admitted that there is an ambiguity in Kant's proof of the principle of causality, which naturally led to misunderstanding. For, in attempting to show that objective sequence or change cannot be determined as such except when it is conceived as a link in a series of changes, he at least suggests the idea that states of the same substance may be regarded as causal in relation to each other. It seems, indeed, to have been Kant's view, or at least his earlier view, that we can prove the principle of causality in general in reference to all substances, whether given in external or internal experience; and whether they be determined to their changes by their own previous states or by the states of other substances. Accordingly, when in the *Metaphysical Rudiments of Physics*, he proceeds to limit the law of causality in regard to objects given in external experience, he lays down the law that for them the cause of change must always lie in another substance. Yet it is clear that by this time Kant had begun to suspect that the principle of causality, like the principle of substance which it presupposes, can be applied, in the first instance at least, only to objects of external experience, and to them only as determined by external causes. For if, as was pointed out above, the

[1] Stadler, *Die Grundsätze der reinen Erkenntniss-Theorie*, p. 152. The subject is very clearly illustrated in this treatise.

idea of existence in time taken by itself, does not involve permanence except in the sense of a continued flux, neither can we say that it involves a permanent relation between the elements that thus pass into each other. Hence, in a remark added in the second edition of the *Critique,* Kant maintains the necessity, not only of perception, but of external perception to supply the subject to which the predicate of causality is to be applied. "In order to exhibit change as the perception corresponding to the conception of causality, we must take motion, as change in space, for our example. This, indeed, is the only way in which we can bring change before us in perception, pure understanding being totally unable to grasp the possibility of change. Change is the combination of contradictorily opposed predicates in the existence of one and the same thing. But it is impossible for any one by mere thinking, without an example, to comprehend how, out of a given state of a thing, an opposite state of the same thing should follow; nay, he cannot attach any meaning to such an idea without a perception. And the perception required is that of the motion of a point in space, the existence of which in different places (as a consequence of opposite determinations) alone makes it possible for us to realise change to ourselves. For, in order subsequently to make even inner changes intelligible to ourselves, we need to figure time, as the form of inner sense, by a line, and the inner change by the drawing of this line (motion): thus using external perception as a means to the understanding of our own successive existence in different states. And the reason of this is, that all change presupposes in the perception of it something permanent ere it can be perceived as change, but that in inner sense no permanent perception can be found." [1]

The Relativity of motion implies that causality must be regarded ultimately as reciprocity.

To this it need only be added that, as all motion is relative, there is no possible consciousness of an object moving directly in relation to space, or of the world as a whole moving in space, but only of the motion of two or more substances which change their position in relation to

[1] *Kritik,* B. 292. We postpone till the next chapter the consideration of the *secondary* application of the Categories, here suggested, to *inner* experience.

each other. And it has already been pointed out, that the principle of the permanence of substance in all change means that the objects in changing their relation to each other in space, cannot change their relation to space as occupying it. It follows, then, that change can be conceived only as an alteration of substances in their relation to other substances, and that all causation is external. And, in a single substance conceived as existing by itself, or in the world as a whole, we cannot conceive of any change as taking place. Or rather, as we should say, from Kant's point of view, we have not in these cases the conditions under which alone we can be conscious of a change. The "second law of mechanics," that every object maintains its state of rest or motion unless it be determined to change it from without, *i.e.*, by another object, is therefore the true expression of the law of causality. It also shows its necessary relation to the law of reciprocity, which simply means that as all change is relative, it must be equally attributed to both terms in the relation. If we regard the change as only in one substance, we are simply attending to one term and abstracting from the other. It might indeed be said that, if we conceive the world as one substance passing through a series of states, we must conceive the successive states as necessarily determined in relation to each other; but, if we thus take the world as one substance, we cannot account for any change taking place in it; at least, we cannot do so consistently with Kant's proof of the principle of substance, which, as we have seen, involves that there can be no absolute change of substance, but only a relative change *within* its identity, *i.e.*, a change of its parts in relation to each other. The principle of substance, therefore, when we combine it with the principle of causality, necessarily expands into the principle of reciprocity.

Kant's statement and deduction of the Principle of Reciprocity.

Kant's deduction of the principle of reciprocity follows the same course as the previous deduction. In the first edition it stands thus: "All substances, so far as they are coexistent, are in thoroughgoing community or reciprocity of action with each other." There is a somewhat improved statement of this principle in the second edition, which, (1) gives prominence to the transcendental aspect of it, and

(2) limits the determination of coexistence to the determination of substances as *in space*. "All substances, *in so far as they can be perceived in space* as coexistent, are in complete reciprocity." Why should it be so? The mere conception of things coexistent does not imply their reciprocal determination by each other. "For, supposing several substances to exist, how can we think it possible that something should follow as effect from the existence of each of them in the existence of the others reciprocally; and, therefore, that in the existence of each, there should be something which cannot be explained from itself without reference to the existence of the others?"[1] This question was answered by Kant himself in the *Dissertation*, by reference to the unity of God as the cause of the existence of all the dependent substances, who at the same time binds them to a unity with each other. *Unitas in conjunctione substantiarum est consectarium dependentiae omnium ab Uno*. For, as Kant argued, "the possibility of a *commercium* of substances is not necessarily involved in their mere existence," seeing that as substances, they are rather conceived as independent of each other. The individualism of Leibniz, in fact, started with the isolation of individual substances as such, and hence it had to treat of their union in one world as a harmony, which was externally established between them. In the *Critique* the problem changes, and for the unity of the *existent* world as dependent on one God, we have the unity of the *known* world as present to the consciousness of one self. The *commercium* of substances is a necessity, because otherwise they could not be known as coexistent in one space. For, Kant argues, space by itself is not perceived so that the coexistence of objects might be ascertained by their relation to it. On the contrary, it is the reciprocal determination of objects by each other, or in other words, their "dynamical community," which is the ground of the determination of them as coexistent in space. "Without community every perception (of a phenomena in space) would be broken off from the others, and the chain of empirical ideas, *i.e.*, experience, would have to begin anew with every new object, without its being possible to

[1] B. 292. General remark on the system of Principles.

connect the previous experience with it, or to place it in a relation of time thereto."[1]

Reciprocity is implied in coexistence as *known*.

We cannot directly perceive coexistence, for the synthesis of imagination by which the data of sense are taken up and combined into images, is always a successive process. Hence, if we were conscious of *that* synthesis, and of that synthesis only, all we should have before us would be a mere succession of ideas, some of which recurred at different times, one being present when another was absent. But, as a consciousness of a succession of ideas in itself does not give us a consciousness of *change*, unless that succession is referred to an object which is permanent, and regarded as a link in the chain of changes of state to which such objects are subjected: so the mere consciousness of a recurrence of similar ideas in successive times would not enable us to interpret that recurrence as showing the *coexistence* of their objects, unless we regarded these ideas as representing states of different objects, each of which reciprocally was a condition implied in the corresponding state of the other. Thus, when I observe first the moon, then the earth, then the moon again, and determine them as coexistent, there is something more in my consciousness than a mere succession of perceptions, first in one order and then in the opposite order. And this something more is not the perception of time or space, as something objective to which each perception is referred, and through which they are dated and placed in reference to each other; for time and space are mere forms of relation. The consciousness of coexistence can, therefore, be attained only if, in the synthesis of my perceptions, I recognise them as representing states of different objects and as connected in such a way, that each of them refers back to the other as its condition. "Now, a relation of substances, wherein one contains determinations of which the ground lies in the other, is a relation of influence; and when reciprocally the substance so determined in itself contains the ground of determination in the substance that determines it, it is a relation of community or reciprocity. Hence, the coexistence of substances in space cannot be empirically known otherwise than under

[1] A. 213; B. 260.

the presupposition of a reciprocity between them; and this reciprocity is, therefore, the condition of the possibility of the things themselves as objects of experience."[1] It is the double refraction, as it might be called, of objects upon each other that determines them for us as coexistent.

Positive and negative aspect of this Deduction.

In all this we have just another specimen of the transcendental argument, which in this case starts with the supposed fact of coexistence, and asks under what conditions it can become a fact for me? In answering this question, Kant endeavours to show that, in order to a consciousness of the coexistence of objects, it is required that the imaginative synthesis by which the elements of the sense manifold are put together, should be determined by the category of reciprocity, and that we should in some way recognise this determination. For, space not being perceived in itself, so that the phenomena might be relatively placed in reference to it, the unity of the space in which objects coexist can be apprehended only as the presupposition of the reciprocal determination of the parts of space. But even these are not perceived by themselves, but only through the reciprocal determination of the phenomena which are perceived in space. These phenomena, therefore, must be apprehended by us as the states of substances, which reciprocally determine each other: the substance being conceived as permanently occupying space and so "representing" its identity, while the changing states in their reciprocal determination, fix at the same time the different substances as coexistent in different parts of the same space. Thus alone can different objects be apprehended as present to us in the unity of one world, a world the consciousness of which can be united with the consciousness of one self. "For the unity of the world, the whole in which all phenomena are supposed to be combined, is manifestly a mere consequence of the tacitly assumed principle of the community of all substances which coexist; for, if they were isolated, they would not constitute parts of one whole; and if their connexion (the reciprocity of the manifold) were not necessary as the presupposition of the coexistence, we could never argue from the latter, which is a merely ideal relation, to the

[1] B. 258.

former, which is a real relation of them. We have, however, shown that community is the ground of the possibility of any empirical knowledge of coexistence, and, therefore, we can quite legitimately conclude from the latter to the former as its necessary precondition."[1]

Of course, this argument—that in order that objects may be determined for us as coexistent, they must be determined as in community—has as its complement the argument, that, if we take away community as not given in perception, we must take away coexistence with it. To put it formally, in the judgment of knowledge coexistent phenomena may be taken as the subject, and reciprocal determination of these phenomena by each other as the predicate; but it is only in relation to this conception as a predicate, that that perception can be given as the subject. And with the withdrawal of the conception, the perception shrinks into a sensation, of which nothing can be said.

Reciprocity as the analogon of the principle of disjunctive judgment.

The difficulty of following this deduction is similar to that which we have found in the case of causality, viz., that the unity of thought and the difference of perception seem to be immediately brought together; and the latter subsumed under the former. Thus, the relation of reciprocity, *i.e.*, the action and reaction of quite different substances of which each determines the other's state, is the *analogon* of the analytic unity of the genus with the sum of its species, which shows itself in the fact that they reciprocally exclude each other, while yet each requires the other as its complement in the totality of the genus.[2] The defect in the analogy, however, seems to be that the different substances are here taken as primarily unrelated to each other, and that the reciprocal determination of their states is regarded as simply the *necessary* contemporaneity of a state or a change of state in one of them, with a state or change of state in the other. Just, therefore, as Kant took cause and effect as two disparate events or changes which follow each other, like the feeling of heat and the perception of flame, so here he takes the action and the

[1] A. 219; B. 265.

[2] A. 73; B. 99. An *analytic* division of the species would necessarily be dichotomous, though even for such a division we should need to give a sense to the negative, which formal logic does not admit.

reaction as two contemporaneous events or changes in the two substances; yet, just as in the former case he conceives that the successive phenomena must be subsumed under the analytic unity of reason and consequent, that so their unrelated difference may be turned into a necessary connexion of events, so here the different contemporaneous phenomena, in order that we may know them as contemporaneous, have to be subsumed under the relation of species in one genus, (which, while they exclude, yet imply each other,) in order that *their* unrelated difference may also be turned into a necessary relation of the states of different substances. Now, we have already seen that in the case of the causal relation, the defect of Kant's deduction lies in his omission to look for the identity which persists through the difference of the events related as cause and effect, an omission which made their connexion appear as a kind of miracle operated on them by thought; but this defect was partly rectified by the way in which he connected the principle of causality with that of substance, and also by the way in which he insisted on the continuity of change. Now, there is a similar error and a similar correction of it in Kant's treatment of the principle of reciprocity, which also he conceives as presupposing the principle of substance. For, this means that in determining the changeable states of substances as contemporaneous, we must not only unite them as reciprocally determining each other, but we must presuppose one all-embracing substance, which " represents " space as an infinite given whole, and which remains unchanged in all relative changes of its parts. But such reciprocity of changes *within* an identical substance, cannot be conceived as a relation of phenomena which are qualitatively indifferent to each other, but only as a relation of polar opposites which at once imply and exclude each other. It is such reciprocity that Kant in his *Metaphysical Rudiments of Physics* seeks to discover in matter (as determined by repulsive and attractive forces), and it is such reciprocity that physical and chemical science is always striving to reach in all the different classes of phenomena with which it deals. As in the case of causality, the scientific man is not satisfied without the reduction of cause and effect to

Necessity of synthesis between different externally related elements corresponds to the analytic unity of formal judgment.

identity, so in the case of reciprocity (into which causality passes when fully understood), he is not satisfied till he has resolved the different constitutive elements of a complex result, into correlated factors which have no meaning except as factors of this relation. In both cases, as has been already shown, the categories with which he operates are categories of reflexion, categories which involve that double movement of differentiation and integration which gave rise to the two problems of Kant. For, as we have seen, it was his *first* difficulty to understand how it is possible to proceed from the position or assertion of one thing to the position or assertion of something different from it; and it was his *second* difficulty, suggested mainly by Hume, to understand how, different phenomena being given, it should be possible to discern necessary relation between them, and so to return from difference to identity. But Kant's formal view of thought, rendering the former impossible, made it necessary for him to suppose that in reference to space and time, the pure identity of thought with itself, as expressed in the various analytic judgments, gives rise to various analogues of itself; *i.e.*, conceptions of necessary relations between factors given as different. If, however, we reject this formal view of thought, and regard it as *essentially* reflective, *i.e.*, as essentially the position of one thing through the position of another different from it, we find no difficulty in the counter problem, how thought can enable us to combine as necessarily related, the elements which we at first apprehend as different and external to each other. Now, the category of reciprocity is the highest category in which this reflective movement expresses itself; and it includes, therefore, the elements involved in the categories of substance and causality, in which the emphasis is laid upon the identity and the difference respectively. It may be said, therefore, to solve the difficulties which they leave unexplained, and to bring to light what in them is latent. But, though it thus carries us beyond the other categories of reflexion, it does not remove the essential defect of reflective thought itself. This becomes manifest if we consider that in reciprocity, the identity is presupposed and latent; or, what is the same thing, we seem, in thinking things under this

category, to start with a difference of substances which externally determine each other, though ultimately we are driven by the latent logic of the category to look for such a thorough-going reciprocity in the determination of these substances, that their independence disappears and gives way to a correlation of factors, neither of which can exist without the other. And the only problem that remains is the problem how the unity or identity which we have thus reached should have expressed itself in such a duality of forms; a problem, however, which is not difficult to solve, if we consider the correlativity of these forms, and the fact that the unity or identity is a mere abstraction when we do not regard it as expressing itself in their duality.

These categories necessarily involve a given difference which is to be reduced to identity.

Another way of indicating the defect of these categories, is to point out that in them all Kant is seeking to make intelligible the consciousness of change, or, in other words, to bring it into relation with the unity of thought. Yet, ultimately, the explanation of change given by means of these categories seems to eliminate the fact to be explained by reducing cause and effect to identity, and resolving all difference of the elements in this identity into a difference of factors which are correlative with each other, and only ideally separable. In this way we carry back the difference to unity, but we do not explain how, out of the unity, the difference should ever arise. For, as the category of causality loses its meaning whenever we cease to hold to the idea of disparate phenomena, of which one disappears when the other comes; so the category of reciprocity loses its meaning when we cease to hold to the idea of independent substances which maintain their independence even while they act and react on each other. The category of reciprocity, therefore, still contains a contradiction, as it starts with a difference which it explains away or idealises, yet without enabling us to conceive of the identity to which it brings us as itself the source of the difference, or as an identity which determines or differentiates itself. It is, therefore, a category in which we cannot ultimately rest satisfied; for, though it brings together the identity of substance and the difference of causality, it still brings them together in an imperfect and self-contradictory way, and *it* also must find its explanation in a higher category.

This contradiction can only be solved in a higher category.

What that higher category is, we may see if we consider that, under the category of reciprocity, objects are considered in themselves and in their relations to each other, without being also considered in relation to the thought for which they are. For, so long as this is the case, to the ideal unity and identity to which in their difference they point, must always be opposed their real difference and change, and they cannot be conceived as factors in an organic whole, which in all its change remains one with itself. Now, Kant at least points the way to this higher view of things when he maintains, not merely that the conscious self can draw from itself categories under which the manifold of sense may be determined as a world of coexisting objects with changing states, but that the consciousness of self presupposes such a consciousness of objects. For this means, not only that the unity of the self can, as it were, lend its own nature to the manifold to such an extent as to bind its different elements together as parts of one whole, but that it *must* do so, in order to bring that manifold into relation to itself. It means, therefore, that the determination of a manifold under such categories is a necessary step in the development of the consciousness of self; or, in other words, that that consciousness is not possible except in correlation with, though in distinction from, a world in space and time. And, if this is the case, then the manifold which is supposed to be externally given, as the material out of which the spontaneity of the understanding may manufacture a world, cannot really be an external or alien *datum* for the mind which thus operates on it. That which the subject needs, if it were merely as the '*Anstoss*' in reaction upon which it becomes conscious of itself, cannot really be a foreign or alien matter; nor can the process by which it is "given," be regarded as the intrusion of something external upon the unity of pure thought. Now, if this is so, the categories of necessary relation, (which presuppose the manifold as given, and only determine it so far as to bring its elements together by an external necessity, and therefore in the consciousness of an objective world which is opposed to the self,) will not be the highest categories by which we can determine objects. They will appear to be so, only so long as atten-

tion is directed mainly to the connexion of objects with each other, and not to their necessary relation to the unity of the self. For, when this last relation is brought into view, it appears at once that, as the consciousness of self presupposes the consciousness of objects, it presupposes the manifold to be connected as well as a synthesis of connexion established in that manifold. And the complete determination of the object in relation to the conscious self, will not be reached, so long as the manifold is connected together merely as constituting a world of objects in necessary external relations to each other. For such complete determination, it will be required also that the world of objects should be recognised as the essential counterpart of the conscious self, and therefore as in all its difference involving the unity of self-consciousness, *i.e.*, a unity which in self-consciousness becomes clearly revealed or manifested. The stage of thought in which we see the world as a whole of separate parts, which externally determine each other according to necessary laws, will not, therefore, on this view be the highest stage of knowledge. It will be only the preparation for a still higher stage, in which the external connexion of things with each other, is regarded as itself the manifestation of an essential unity which they have with each other in virtue of their common relation to the self. Now, it was Kant's great work to show that the determination of objects as such, and as necessarily connected parts of one objective world, is a determination which they have only in relation to the unity of the self. And it would seem as if, having taken this step to correct the abstractness of the view of the world as a whole, independent of the intelligence, he must go on to view that world as an *organic* whole in which the unity of the self manifests itself. But, for reasons which we shall have to discuss in the next chapter, Kant stops at this point, and having recognised that the world is a system of necessity only as an object for our intelligence, and therefore that as such a system it is merely a phenomenal world, he does not go on to modify this view of it, by the idea that the unity of intelligence underlies it. Hence, he does not see that "freedom is the ultimate truth of necessity." On the contrary, he regards the intelligence as conscious of

itself in relation, but only in negative relation to the phenomenal world of necessity, and therefore as rising to a consciousness of freedom only as it abstracts from that world. While, therefore, in virtue of the opposition between the unity of the self and the diversity of the world, the world is regarded as phenomenal, Kant does not see that the very principle which enables us to recognise it as phenomenal, enables us to penetrate to the noumenon which is contrasted therewith. The necessary relation of the object to the self casts for Kant no new light on the object, which remains in opposition to the self, though necessarily related to it. It is this dubious position in which the object is left in relation to the mind as essentially, yet merely negatively related to it, which occasions the main difficulties that appear in connexion with the Principles of Modality. And it is this also which finally gives rise to the Antinomies of Reason; for the contradictions which arise in relation to the phenomenal world, are due to the fact that we are obliged to regard it as a whole in itself, apart from the self, with a view to its determination as an object of knowledge, while yet we are unable to regard it as such a whole, because of its essential relation to the self.

CHAPTER IX.

THE POSTULATES OF EMPIRICAL THOUGHT. KANT'S VIEW OF IDEALISM, AND OF THE RELATION OF INNER AND OUTER SENSE.

Import of the categories of Modality.

"THE categories of modality have this peculiarity, that they do not in the smallest degree add to the conception to which they are attached as predicates, but merely express its relation to the faculty of knowledge. . . . Hence, the principles of modality are nothing but explanations of the conceptions of possibility, actuality, and necessity in their empirical application; and therewith, at the same time, restrictions of all the categories to their purely empirical use, so as to exclude any employment of them to determine things in themselves. For, if we are not to take them in a merely logical sense, in which case they would only express analytically the form of *thought*, but to apply them to the possibility, actuality, and necessity of *things*, then it must be in reference to possible experience and its synthetic unity that we use them, as being that in which alone objects of knowledge can be given." [1]

The Postulates of Empirical Thought as summing up the result of the Analytic.

The principles of modality, in fact, gather up in themselves the results of the Criticism of knowledge, which has been going on in all the previous pages of the *Critique*; for the main business of the deduction of the categories and of the principles of pure understanding, was just to vindicate these conceptions and principles in relation to possible experience and to confine them to such experience. At every step, therefore, we had to turn the ontological question as to the possibility of things into the critical question of their possibility as objects of knowledge: or, in other

[1] A. 219; B. 266.

words, we had at every step to set aside the ordinary dogmatic method of determining known or knowable objects without considering their relation to the knowing subject. For, in answer to the *ontological* question, Kant maintained that we can say nothing, except so far as it is one with the *logical* question. In short, we can assert the possibility of that which is not, and the impossibility of that which is, contradictory with itself. The unintelligible cannot exist; for the assertion of its existence has no meaning. We can go beyond this only by considering the relation of objects to our faculty of knowledge. When we take this relation into account, we see that for the consciousness of objects as such, it is necessary that we should bring together conception and perception, determining the "blind" perceptions by pure conceptions, and giving a real content to the "empty" categories by means of the forms and matter of sense. Knowledge was thus shown to involve at once the "idealising" or universalising of the particular matter of sense by thought, and the "realising" or particularising of the universals of thought by sense. The possibility, actuality, and necessity of objects of knowledge may, therefore, be determined by reference to the conditions of knowledge, as well as in relation to the conditions of pure thought; and we can say, not only that objects, as *conceived* must not be self-contradictory, but that, as *known*, they must be conformed to the *a priori* conditions of perception and thought. Being so conformed, they will be *possible;* if given in perception, they will be *actual;* while they will be *necessary* only if they are connected with what is already determined as actual by means of the universal conditions of experience.

Difficulty as to Kant's view of the relation of possibility and actuality.

We found, however, that there was a special difficulty running through all the *Critique* as to the connexion of the two elements which have to be distinguished from and related to each other in experience; and we may expect that this difficulty will recur in the discussion of the Postulates of Empirical Thought, which gathers up its general result. This difficulty comes into view the moment we look closely at Kant's definitions of possibility and actuality. "That which agrees with the formal conditions of experience (of perception and conception) is possible."

"That which agrees with the material conditions of experience (of sensation) is actual." Does this mean that these two sets of conditions may be separated—that, on the one hand, we can determine a thing as possible which we have not presented to us as actual, and that, on the other hand, we can have presented to us as actual that which we have not determined as possible, *i.e.*, which is not determined as such by the principles of pure understanding? Or, does it mean simply to call attention to two aspects in which we must regard every object of experience as perceived and as conceived? The answer to these questions cannot be given by a simple "yes" or "no," without a consideration of the different forms of language and the different ways of representing the connexion of the two elements to which Kant is led, according as he approaches conception from the point of view of perception, or perception from the point of view of conception.

Is it perception that enables us to refer our conceptions to objects, or conception that enables us to refer our perceptions to objects?

In the *Aesthetic*, Kant deals with the ordinary view of perceptions as immediately given ideas of particular objects. Hence, he speaks of perception as *directly* referred to its object, and of conception as *indirectly* referred to its object through the perception. The effect, however, of the *Aesthetic* was to take over to the side of the subject not only the sensations but also the forms of time and space by which the object was supposed to be determined in perception, and to leave the object in itself utterly indeterminate, as a thing from which all perceptive predicates are withdrawn. But the next step, taken by Kant in the *Analytic*, involves the further reduction of the perception to a mere manifold, which has no unity, and is, therefore, no idea of anything. To give it such unity, and therefore to refer it to an object, the conception must be predicated of it. We are, therefore, required to conceive our knowledge of an object as such as due to a process of judgment, in which the perception is brought under the conception of it; yet, at the same time, we are taught that it is only through this process that there can exist for us any object about which it is possible to judge. This, however, is made more intelligible by the interposition, between sense and thought, of a synthesis of the imagination which is conformable to the conception, or

of which the conception is the principle "represented in its universality." Imagination, acting in conformity with the conception upon the manifold of sense, is supposed to produce an image, to which the conception can then be attached as a predicate. And we can see that the judgment so made is not a process of analysis, if we observe that the detachment of the conception from the perception, and the reference of the perception to the conception, are not two independent processes, but different aspects of one process of differentiation and integration, which is involved in the transition from a sensitive to a thinking consciousness.

Why both these modes of expression can be justified by Kant.

If we try to work out this view on the lines of Kant we find the old modes of expression taking new meanings. To say that conception is attributed to the object through perception remains true, only if we do not forget that it is just in relation to the conception which is thus separated from it, and as determined by that conception, that a sensation becomes the perception of an object. Hence, we have two apparently contradictory forms of expression—(1) that the understanding by means of its conceptions refers our perceptions to objects, and (2) that conceptions are referred to objects only indirectly through perceptions. The former mode of expression is preferred whenever Kant has to show that "perceptions without conceptions are blind"; the latter when he has to show that "conceptions without perceptions are empty." For, in so far as it is the recognition of the conformity of the synthesis of perception with a rule derived from a conception which enables us to objectify our perceptions or refer them to objects, it may be said that the object is not perceived but only conceived; while, in so far as the images of perception are supposed to be formed by synthesis according to a rule in order that they may be brought under the conception, it may be said that it is through the perception that the conception gets objective meaning.[1] If, however, we do

[1] The transcendental object is the correlate of the transcendental subject, which is "neither a perception nor a conception, but merely the form of consciousness which is implied in all perception and conception, and enables us to turn them into knowledge." (A. 382.) But the same thing is said of the transcendental object itself, which also is neither a perception nor a conception. It is "a mere X, of which we know nothing, and of which, according to the present

not carefully note the two aspects of the process of determining objects as such—as at once a determination of perception by conception, and of conception by perception—we may fail to appreciate either the necessity of the separation of the two, or the way in which they are brought back to unity in the judgment of experience.

When we ask how perceptions become determined as perceptions of objects and so as real or actual, we get one answer.

This difficulty of co-ordinating the two sides of Kant's thought shows itself especially in the different views of reality or actuality, which we get when we are considering how conceptions, and how perceptions, are to be determined as objectively valid or real. In order to the possibility of experience our perceptions must be determined by the schematised categories. But this means that a sensuous image cannot be recognised as the image of an object, unless it be brought under the principles of the understanding and determined as an element in the "context of experience." Dreams and mere imaginations refuse to enter into that context, and it is by this that we distinguish them from realities. Hence, we find Kant saying in the *Prolegomena* that "space itself, with all the phenomena which it contains, are ideas, the objective validity of which is shown by their connexion according to the law of experience, just as the actual existence of my soul is shown by the connexion of the phenomena of inner sense"; and a few lines after he adds that "the doubt whether experience furnishes secure criteria to distinguish it from imagination"[1] is easily removed, as, in fact, it is always removed in common life, by "investigating the connexion of the

constitution of our understanding, we can never know anything, but which comes in only to serve as the correlate of the unity of apperception, and to supply that unity to the manifold of sensible perception by means of which the understanding unites that manifold in the conception of an object." (A. 251.) Kant goes on to say that, "the transcendental object cannot be detached from the data of sense, for otherwise nothing would remain through which it could be thought," and that it is not to be taken as "a particular object given to the understanding alone," and determined for it by the categories; for "the categories only serve to determine the transcendental object (the conception of something in general) by that which is given in sense." This must be taken to mean that, while the perception is referred to an object only as brought under the conception, the conception is the conception of an object only as determining the perception. Each, therefore, apart from its relation to the other in the judgment, loses all its meaning.

[1] *Prolegomena*, § 49, R. III. 106; H. IV. 84.

phenomena of inner and outer sense, according to the universal laws of experience." It is thus the principles of understanding, and especially the Analogies of Experience, which determine for us what is real and what unreal, or, we should rather say, enable us to distinguish in what sense any particular appearance is real; for even a dream, recognised as such, is referred to a particular place in the context of experience. In this sense, it is only for a thinking consciousness that there can be any question as to the reality and unreality of its perceptions; and such a consciousness can answer the question only by showing that they are, or are not, really possible, *i.e.*, that they can, or cannot, be connected with other perceptions according to the pure principles of the understanding.

When we ask how conceptions become determined as conceptions of objects and so as real or actual, we get a different answer.

So far, however, we have been looking at experience from the side of perception. From the side of conception we seem to reach a somewhat different result. For conceptions have all their validity in relation to perceptions; they are, therefore, regarded merely as possible predicates of objects, which become actualised only in so far as their objects are given in sense. From this point of view, Kant maintains that no conceptions can be shown *a priori* to be conceptions of actual or even possible objects except so far as they are necessary to the possibility of experience. Even these are in themselves merely possible; for they can be shown to be necessary "only in relation to something accidental, viz., possible experience"; and they become actual only when, and because, data of sense are given which can be subsumed under them. From this point of view, then, conceptions *as such* cannot go beyond possibility; and they cannot go even so far, unless they are conceptions necessary to experience. And it is perception alone which can carry us over from possibility to actuality. Nay, we find Kant even speaking as if perception supplied in itself a sufficient criterion of reality, apart from all determination of it by conception, and as if such determination were necessary only to establish the reality of that which is not given in perception. To this view at least such language as the following would be most conformable: "That the conception of a thing precedes its perception, signifies merely its possibility. But

the perception, which furnishes the matter for the conception, is the one thing that gives it the character of reality. We may, however, recognise the existence of a thing before the perception of it, and therefore *comparatively a priori,* if only it be connected with certain of our perceptions according to the principles of their empirical combination, *i.e.,* the analogies of experience." [1] Here, therefore, Kant speaks as if the difficulty were only as to the reality of what is not directly perceived, and as if, therefore, nothing were needed to certify for us the reality of that which is perceived or to "distinguish it from an imagination." And it is in harmony with this that in the immediate context we find him asserting that "in the mere conception of a thing no character which determines it as existing can be included." [2]

Why Kant never completely solves the contradiction between these two answers.

We can understand the possibility of Kant's looking at the subject in these two opposite ways only if we remember the reciprocal presupposition of perception and conception in the judgment of knowledge, and the way in which Kant tries to explain it, now from the point of view of perception, and now from the point of view of conception. The effect of this is, no doubt, a formal contradiction which Kant himself never disentangles, but which *we* must endeavour to disentangle, if we would do

[1] A. 226; B. 273.

[2] In the *Reflexionen Kant's* (ii. § 1095) we find Kant saying that "Possibility is thought without being given, while actuality is given without being thought, and necessity is given through being thought." This statement (as Erdmann points out in his note) finds its parallel in the idea of the *Prolegomena*, according to which sense-perception enables us to make judgments which become judgments of experience by the aid of the categories; and also in the language of the *Critique* (A. 90; B. 122), which, however, may be regarded as a preliminary statement. There are other passages where the same ideas are traceable. On the other hand, it is the prevailing view of the *Analytic* that perceptions (not conceptions) are in themselves the subjective determinations of the mind, which are referred to objects as they are bound together in accordance with the principles of the pure understanding, and that, apart from this, they are 'for us as good as nothing.' We cannot bring these two statements into line with each other, unless we regard them as an imperfect expression of the truth that neither perception nor conception has any meaning for us except as combined in the judgment. In the unity of the judgment, the perception may be regarded as expressing the reality, and the conception the possibility; but they have that force only as factors in the judgment of necessity, which, as Kant says, is "existence as given through its very possibility."

justice to him. The important point, as I have already indicated, is to distinguish the ὁδὸς ἄνω and the ὁδὸς κάτω, *i.e.*, the regressive method in which Kant follows experience back to its *a priori* conditions, and the progressive method in which he advances from the *a priori* conditions to the experience which depends upon them. In the former point of view, as we have seen, Kant begins with a supposed fact, say, the fact that "something happens," and asks how it can become a fact *for me*. In this way he tries to show the necessity of the forms of sense, of the conceptions of the understanding, and finally of the unity of apperception,—all in order that the supposed facts of nature may become facts for me. Kant thus vindicates the *a priori* generally as necessary to the possibility of experience. What he does not recognise is that, as these conditions are conditions without which the facts would not exist for us, *i.e.*, as without these conditions the facts would lose for us all the determination which they seemed at first to have, we can no longer speak as if there were an element in them which is given apart from the process whereby they become known. What we have been doing in the deduction of the *a priori* principles has been simply to show that the object has no meaning except as an existence for a self, and that, therefore, we are obliged to add on the new qualifications which are involved in this relation, if we would not take away from it all the qualifications which it has as an object. But, having followed out this argument to its result, we cannot be allowed to turn round, and speak as if there were something given—if not an object, a perception, or if not a perception, a manifold of sense—apart from its being known. This *residuum* of the original fact, however, Kant always preserves; and, consequently, the actuality or reality seems to him to be something additional to the complete thought or real possibility of the object. Hence, while it is said that being is "for us as good as nothing," if it is not being-for-thought, yet *being as given* is still conceived to be something over and above *being-for-thought*. The idea of a logical subsumption of perception under conception holds its ground, even when it is confessed that *perception* is nothing for us except as subsumed, and it is all but

confessed that the *thought* is nothing for us (it is said to be empty) except in relation to the perception it is supposed to subsume, *i.e.*, that thought has no meaning except as referring to being and including it. In other words, as there is no being except being-*for*-thought, so there is no thought which is not the thought *of* being,—being manifesting itself in consciousness to another, or, in self-consciousness, to itself.

Conception presupposes and transcends perception, as self-consciousness presupposes and transcends the consciousness of objects.

If the ὁδὸς ἄνω stops short of its goal, the ὁδὸς κάτω becomes impossible. This is what is meant by Kant's assertion that, even if we have the complete thought of an object, even though we fully understand the conditions of its possibility, we are not able apart from perception to say that it is real. If this meant merely that speculation has no meaning except as an interpretation of facts, or that all it can do is to discover what is really meant by these facts, the statement would be quite unexceptionable. It would in that case be only an explanation of the true meaning that underlies the saying, *nihil est in intellectu quod non prius in sensu.* It would be another way of stating that in our experience self-consciousness presupposes the consciousness of objects, and cannot be other than a return upon the unity involved in that consciousness.[1] If we could, therefore, conceive of a thought which was not relative to perception, or did not include it, such thought could never by its own movement make its way to perception. If self-consciousness could be divorced from the consciousness of objects, the breach could never be healed. But no such breach ever exists. No doubt, in the first appearance of self-consciousness, the self is abstractly opposed to the object; and in the advance of reflexion, this opposition reappears as the distinction of

[1] We must, however, always remember that the consciousness of objects does not exist apart from this return. Apperception, from one point of view, is only the interpretation of perception; but this interpretation exists always, though it may be as yet in what Kant calls a "weak" form, in all that can be properly called perception. "This consciousness may be but weak, so that we are aware of it only in the effect and not in the act itself, *i.e.*, that we do not connect it immediately with the genesis of the idea; but, in spite of this distinction, *one* consciousness must always be discoverable," (when a manifold is bound together in the idea of an object,) "however it may want outstanding clearness," *i.e.*, the clearness which belongs to the conception as at once distinguished from, and referred to, the perception (A. 104).

conception from perception—conception in which the mind seems to abide with itself, from perception in which it seems to come into contact with something different from itself. Kant's separation of the analytic movement of thought from the synthetic movement of knowledge is another form of the same fundamental contrast. But, if we ask how the analytic unity of thought becomes possible, we are obliged to say with Kant that it is mediated by the synthetic unity of the consciousness of objects.[1] And it is difficult to see how, consistently with this view of analysis as being synthesis and something more Kant could still speak of it as something less. In any case, the absolute opposition of possibility to reality, of conception to perception, stands or falls with the opposition of analysis to synthesis; and the same considerations that are fatal to the latter must be equally fatal to the former. It is true, indeed, that we can think of something as possible which we do not know to be real, and which we cannot know to be real or unreal till new perceptions have enabled us to verify or reject it. Every scientific hypothesis furnishes an instance of such conceptions which are merely possible. But this means only that conception develops with, and in relation to, perception; which is of course necessary, *if* conception is but perception returning upon the unity implied in it. If we do not know all the conditions of the possibility of an object, we do not know its reality; and if a new perception enables us to discover such reality, it is by enabling us to complete our thought of its possibility. Kant, however, speaks as if that thought might be completed, and yet the object be conceived as merely possible so long as it is not presented in sense: and on this it is a sufficient criticism to point out that in sense apart from thought no object can be presented, and that, if we take sense as meaning perception, the presentation of the object in perception necessarily implies an addition to our thought of it, and,—in the case where a perception enables us to verify a hypothesis,—this addition must be just that which is needed to correct and complete our hypothesis, or our conception of the *real* possibility of the object in question. If we could know

[1] B. 133 *note*.

the whole conditions of an object apart from perception, we should know its reality; and that we cannot do so, merely means that there is no such thing as thought apart from perception, no thought which is not the return of perception upon itself. On the other hand, through the presence of an object in sense, we should not know its reality if such presence were anything externally added to thought; for, in that case it would be at most the presence of a sensuous image, which could not tell us anything about the possibility of any object as such.[1]

[1] In the Works of T. H. Green, II. 63 *seq.*, this distinction is fully discussed, and Kant's position in relation to it clearly stated. The following passage may be quoted:—"It is not that there are three sorts of objects, the possible, the real, the necessary, but that the real world is known to us through a succession of experiences, which the unity of the understanding renders a whole of mutually qualifying elements, and that thus to us in any stage of experience, there are many possibilities of which we cannot yet say whether they are real; they are *possibilities*, as not being inconsistent, according to the formal conditions of experience, with our hitherto experience, but possibilities of which we cannot say that they are *real*, because our hitherto experience is only a part of possible experience."

"Kant's error (I think) lies in treating *such* possibility as 'objective possibility.' It is not objective possibility, unless consistent with the whole order of the world as it is, and whatever is possible in this sense is also real. In this latter (the true) sense of the 'objectively possible,' it is quite true that the object, when from possible it becomes real, is 'not further determined,' but only so because in this sense the possible and the real are the same. To the *objectively possible* in the above sense, the occurrence of a sensation (a new perception) on our part makes no difference. To the *subjectively possible* it may make a great difference. It may verify or falsify an hypothesis. A 'subjectively possible' conception must precede every experiment. The experiment shows whether a relation of phenomena, supposed to be possible, is real or not. Through it nothing becomes real which was not real before. 'Is it not the case, however,' it may be said, 'that through it what was *conceived as possible* comes to be conceived as real, and that without any change in the content of conception?' No, because the experiment always involves the analysis of some phenomena not analysed before; it enables you to judge that *a* really always accompanies *b*, whereas before you only guessed it, because, after a crucial experiment, you are able to set aside all conditions in the complex phenomena, which included *b*, and which *a* had been found to follow, except *b* itself."

"Thus, taking the 'possible object' in one sense, it is quite true that the occurrence of a perception corresponding to it makes no difference to its content; but of such an object it is unmeaning to say that, through the occurrence of perceptions, from being possible it becomes real. Taking 'possible object' in another sense, it is quite true that the occurrence of a perception converts its possibility into reality, but, in doing so, it further *determines the conception* of the object."

Reasons for the imperfect development of this principle in Kant.

While, then, it must, in a sense, be admitted that perception is logically prior to thought, and consciousness of objects to self-consciousness, it is not allowable for us to treat the former as having any *residuum* in them which is separate from, and inaccessible to, the latter. We can, however, see how Kant should hold that it was so, when we consider how he regarded pure self-consciousness as an analytic judgment, and how consequently he conceived thought as confined to mere analysis of all matter given to it. It is true that he gives us the means of correcting his error when he speaks of the analytic unity of apperception as implying or presupposing the synthetic unity (of the consciousness of objects). But, as I have often pointed out already, he regards the relation of the former to the latter as negative, just as if self-consciousness were reached merely by abstraction from some part of the contents of the consciousness of objects. And, as the method of mere abstraction cannot be reversed, he holds that the necessity of the *ὁδὸς κάτω*, *i.e.*, of the reference of perception to thought, does not involve the necessity of the *ὁδὸς ἄνω*, *i.e.*, of the reference of thought to perception. He is obliged, indeed, to regard thought as taking on a synthetic function in relation to the data of sense; but he holds (1) that this synthetic function is to be explained by the reflexion of the pure or formal unity of thought (in the analytic judgment) upon the forms of sense, and (2) that it cannot yield any results higher than the mathematical principles and the analogies of experience, *i.e.*, it cannot do more than enable us to establish necessary relations between elements given as disparate from thought and from each other. The categories of external relation are thus its highest products, the furthest point to which pure thought can go in introducing its own unity into the data of sense. And in these categories, after all, we have only *analogues* of the unity of thought. To go further than this, and establish an organic unity between the different elements thus taken up, is a step from which we are precluded by the nature of space and time, the conditions of the given matter which thought tries to absorb. And it follows, of course, that we are not able to establish such a unity between thought itself and the

matter it takes up. In dealing with the matter of sense, thought is, as it were, an *episcopus in partibus infidelium,* and cannot thoroughly convert that matter to the likeness of its own transparent unity; rather, it is itself subdued to the element it works in, and produces only a synthesis or external combination which is analogous to that unity. And it is this that explains the final recoil of thought upon ideas set up by itself as a goal for its endeavour, as an aim which it must follow in all its empirical work, but with which the result of that work remains always incommensurable.

The principles of the possibility of experience cannot be regarded as merely possible.

If we reject this view, on the ground that the seeming contingency of objects in relation to the conscious self, and the consequent opposition between perception and conception, is simply due to the ordinary abstract view of things as unrelated to the subject for which they are, we must also reject Kant's idea that conceptions in general, and especially the conceptions which are the conditions under which objects are determined as such, are themselves merely possible. The universal conditions of all experience cannot themselves be regarded as particular conditions, which require to be united with other conditions in order to constitute knowledge. It is true that there is no meaning in the universal except in relation to the particular, any more than in the particular except in relation to the universal; but this only proves that we cannot trace experience back to a thought and a perception, which exist independently of each other. The transcendental deduction, while it shows that particular facts or objects exist for us only through the conceptions of the pure understanding, forbids us to turn our hand and speak of these conceptions as hypothetical till real objects are given in sense. For, on the one hand, it is only as already determined by those principles that sense can supply any particulars that could be supposed to verify them, and such verification, therefore, would come too late or would involve a circle in reasoning. And, on the other hand, the transcendental reflexion which calls attention to the universal as presupposed in the particular, as it reaches the universal only *through* the particular, does not need to look to the particular for any further verification of the

reality of the universal. What appears in particular cases as such verification is always, as has been already shown, the completion and correction of our conceptions by new conceptions; and if the new perceptions which are said to verify our conceptions, did not also bring new conceptions, *i.e.*, if they did not add to our conception, they could not bring to it any verification which it has not got already simply in being thought.

The modal principles must be regarded as expressing the organic unity of objects with each other and the intelligence.

If, however, this view be adopted, a great change will be produced in the Kantian conception of the principles of modality. For these principles are supposed to call attention to the nature of known objects as determined by their relation to the subject, and especially to the limitation of knowledge to phenomena, which arises out of this relation. But in what sense is this limitation to be understood? It does not mean, we have seen, that we are limited to the knowledge of objects given as such in sense, for no objects are so given. It means that objects exist for us only through a synthesis of the manifold of sense in relation to the unity of the conscious self, and that, therefore, the determination of these objects in themselves and in their relations, as constituting one world of experience, cannot give us a complete knowledge of them, till we have realised that it is a determination for the self and by the self. When, however, we thus regard all objects as objects for-a-self, our conception of these objects and their relation becomes essentially altered. Thus, the perception that the action and reaction of objects upon each other only exists *for* a conscious self and cannot be separated from their relation *to* such a self, should lead us to recognise that, beneath the appearance of external action and reaction, there is a deeper community or unity of objects, of which such apparent external determination by each other is the manifestation. It should prepare us, in fact, for the discovery that the external relations of objects are the result of a deeper internal or organic relation of them, which is hid from us only by the abstract way in which the ordinary consciousness and also science deal with objects, without regard to their relation to the self. This, Kant, of course, does not recognise; but he at least recognises that the relation of objects *to* the self cannot

be brought under the same categories as those which determine the relations of objects to each other *for* the self. And it is one of the chief objects of his critical work, to show that the consciousness of this relation of objects to the subject makes a complete change in our conception of these objects, authorising us to bring them under determinations to which they could not be subjected if they were regarded as things in themselves. But he uses this idea only as a justification for the application of the Mathematical Principles and the Analogies of Experience. That is, he attempts to show only that objects are necessarily determined in relation to each other by these principles, because they are determined in relation to the self. But he does not see that the perception of the necessary relation to the self of the objects as so determined, throws a new light on the objects themselves, and alters our view of their relations. It is, however, obvious that, if we say that objects are determined, *e.g.*, by the Analogies of Experience, only in relation to the self, we are forced to change our views of these very Analogies, and to recognise that the objects which, under these Analogies are regarded as externally determining each other, have really a deeper community or unity with each other.

Reason why Kant rejects this view.

Of this point I shall speak further at the end of this chapter. For the present, it is sufficient to repeat that the reason why Kant refuses to advance to such a conception, which yet he was the first to suggest, lies in his rooted prejudice as to the analytic character of thought in itself. In spite of this analytic character, Kant regards thought as furnishing in relation to the forms and matter of sense, certain principles of connexion, by which the manifold of sense may be determined so as to give rise to a consciousness of objects: but here he stops. Having brought the extraneously given manifold into unity under the conception of an object, the thinking subject, according to Kant, is conscious of itself in relation, but only in negative relation, to that object. And it still appears as an accident that an object should be present to it at all; or, to put it more definitely, that a manifold of sense should be present to a subject (which is in itself a pure unity) as the material out of which an objective consciousness can

be developed. This mere contingency of objects of experience in relation to the subject as such, is maintained by Kant in spite of his own recognition that, apart from the consciousness of objects, the consciousness of self would be impossible.

General and particular contingency of objects in relation to the intelligence.

The contingency of experience in relation to thought as stated by Kant, has two aspects; it is a general and a particular contingency. In the former aspect, it is asserted to be a contingency that *any* materials for experience should be given at all; in the latter aspect, it is asserted to be a contingency that *just such* materials should be given as are actually supplied in sense. In other words, there is nothing in the nature of the universal determinations of possible experience that makes it necessary that any object should be given, any experience be realised by us; and there is nothing in these determinations that makes it necessary that the experience realised should be just such as we actually have; for the nature of our intelligence merely fixes certain conditions as to the kinds of experience which are possible, but within these conditions, leaves everything free. Of the first of these kinds of contingency we have already spoken, and it has been pointed out that Kant's own assertion, that the consciousness of objects is presupposed in the consciousness of self, contains its refutation. For that cannot be said to be contingent for the self without which there would be no conscious self, and strictly speaking, no self at all. We can therefore say, that for the self, the object is a necessary presupposition; and from this we may immediately infer that it must be given in conformity with the *a priori* conditions of perception and conception; or, in other words, the sensational matter taken up into experience must be capable of a synthesis by the imagination which is in conformity with the principles of the pure understanding. But beyond this, the matter may be regarded as free from any determination by thought, and therefore the particular laws of nature, as well as the particular objects to which they apply, might, so far as we can see, be very different from what we find them empirically to be.

The idea of the general contingency of objects is modified in the second edition by a new conception of the relation of inner and outer experience.

Now, without for the present questioning the general point of view from which this distinction is drawn, we

may notice that in the second edition of the *Critique,* Kant introduces a new determination into the transcendental view of the objects of our knowledge, to which all particular objects are required to conform, and, in fact, extends in one important aspect the *a priori* determination of experience. In the first edition he had maintained that all particular experiences must conform to principles which were developed by schematising the categories in reference to time. And, as time is the general form of all perceptions, outward and inward, it seemed to follow that these principles apply indifferently to external and internal experience alike; though there may be certain other conditions derived from the nature of space, which must be taken into account in applying them to outer experience. But in the second edition of the *Critique,* we find Kant maintaining that it is only to outer experience under the form of space that the principles of pure understanding must be applied, at least in the first instance, and that any application of them to inner experience is secondary, if indeed it be possible at all. He thus, as I have said, attempts in one way to extend his conception of the *a priori* conditions of experience, in so far as he makes it include the determination by the categories of the matter of sense as given under the form of space, as well as under the form of time; yet, in another way, he limits that conception, in so far as he asserts that the principles so developed apply only to outer experience, and not in the same sense to inner experience. Outer and inner experience cease to be two parallel kinds of knowledge, and the latter becomes posterior to, and dependent on, the former. The result of this is that Kant takes up an altogether different attitude towards the so-called "Idealist," *i.e.,* towards those who deny the reality of external objects as such, or at least the possibility of proving it. To show this, it will be necessary to trace the development of his thought in some detail.

Lambert's difficulty as to time.

The method of dealing with the Idealists which Kant adopts in the first edition of the *Critique,* may be described by saying that he partly lowers internal experience to the level of external experience, and partly raises external experience to the level of internal experience. Lambert's

criticism of the *Dissertation* had already brought Kant face to face with a difficulty that arose out of his view of space and time as forms of perception. Lambert had found it comparatively easy to regard space as merely an ideal form, seeing that it is a form under which we know things other than ourselves but he had found it hard to take the same view of time as the form of inner experience, and to admit that we know even our own states merely as phenomena and not in their real nature.

It is answered by equalising inner and outer experience.

In answer to this objection, Kant argues that, as we can determine the relation of things in time *a priori*, time cannot be a determination of things which belongs to them apart from our perception. Self-perception, as the perception of our states in time, is thus affected by a form which reduces the object-self to the phenomenal level, to which things without us are admitted to be reduced by the fact that we know them only through our own ideas. The mediation of a form, under which things are brought in being perceived, is implied in both cases; and if it reduces the one into a phenomenon, it must reduce the other also. The error which has led to the idea that things in space are inaccessible to that immediate perception, in which our inner being is present to us, is explained more fully in Kant's comment upon the fourth Paralogism of Rational Psychology. It had been argued by Descartes and others that our consciousness of external things is problematic, because they are *outside of* us, and therefore we can know them only by their effect upon us. For, " the inference from effect to cause is always doubtful," and it might be that, after all, what we referred to something external, was to be regarded simply as the result of something internal. In this way Descartes was led to maintain that all we can be sure of is the play of our own states of consciousness. To this Kant answers that, while in a sense it is true that we cannot go beyond ourselves and what is immediately present in our consciousness, yet the inference drawn in regard to things in space is erroneous; because it involves a confusion between the *externality of things to each other*, an externality which belongs to them only as they are present in our consciousness, and an *externality to consciousness*, which would

be the negation of such presence. But, if it is once seen that things can be determined as in space only as they are objects of perception to us, it becomes impossible to make such a confusion, or to think that "in space" means "out of consciousness." The "outness" is recognised as existing between objects which are for consciousness, and not between consciousness and objects. Now, this is what Descartes and his followers overlooked, and therefore their "Transcendental Realism led directly to Empirical Idealism." Considering space to be a determination of things in themselves, not only in their relations to each other but also in their relation to the mind as a thing in itself, they were obliged to deny that we can have real knowledge of that, which *ex hypothesi* is outside of our minds just as one external object is outside of another. On the other hand, Kant claims for his own Transcendental Idealism that, just because it teaches that reciprocal externality can belong to objects only in relation to us who perceive them as in space, it shows that we perceive external objects in space just as directly and immediately as we perceive the states of our own consciousness in time. It may, indeed, be objected that we are liable to illusions, and seem sometimes to perceive objects in space which do not really exist; and, that being the case, it may be asked whether space itself with all its contents may not be illusory. But, the answer is that the very possibility of such an illusion presupposes the reality of space. An illusion is a particular phenomenon referred to the wrong place in the context of experience, but it presupposes the existence of that context. To suppose that space and all outer experiences are illusions would be virtually to deny that consciousness makes a distinction between the different elements of its content, which it obviously does make, on the ground of the nullity of another distinction which it cannot possibly make. We cannot divide the contents of consciousness into a content which is *in* consciousness, and a content which is *out of* consciousness; but we certainly can and do make a distinction between objects in space and the successive perceptions or feelings of the sensitive subject, which, as such, are not apprehended as in space, and therefore not as spatially related to each

other. It is the vain search for an impossible object external to me in the sense of being out of my consciousness, which throws doubt upon the simple fact that there are objects in consciousness which are represented as external to each other, and as different from the ideas which are referred to my subjective states. But, if there were objects outside of me in the former sense, they would not be in space: for nothing can be in space which is not *represented* as being in it. It is true that, as in the case of the illusion mentioned above, we may represent as existing in space what is not really there; but this merely means that we have given a wrong interpretation to certain sensations, or that we have referred a phenomenon to the wrong place in the context of experience. But the correction of such an error can come only from the necessity we are under of finding a place for everything in that one context. If I see something which I believe to be a tangible object on the window pane, and if when I put out my hand to touch it I find nothing, I discover that the supposed object does not conform to relations of sight and touch which I have otherwise learnt to hold good for objects of external perception; hence, I am obliged to find another interpretation for the visual appearance in question. But, both the mistake and its correction would be impossible, if there were no ordered connexion of external experience to which phenomena could be referred. And if there be such an ordered connexion, that is all that we mean by existence in space. In like manner, all that we mean by existence in time is, that there is a similar connexion of phenomena as represented in it. On the other hand, if by the existence of objects we mean their existence as things in themselves, apart from all conditions in which they are perceived and known, we are not able to say whether the unknown ground of external phenomena is, or is not, different from the unknown ground of internal phenomena; for we are not able to say anything definite about either. "If any one should ask whether my Psychology is dualistic, I answer, 'Certainly, but only in an empirical sense'; by which I mean that in the connexion of experience matter is really presented to outer sense as a phenomenal substance, just as the thinking ego is really

presented to inner sense as a phenomenal substance. In both cases, the phenomena must be connected together according to the rules which this category of substance brings into the connexion of inner and outer perceptions, with a view to the constitution of an experience. But, if it be proposed to me to widen the conception of Dualism and to take it, as is usually done, in a transcendental sense, I must point out that by such a course I should deprive myself of any ground for maintaining Dualism, in preference to either of the other alternative systems of Materialism or Spiritualism. To assert such a Dualism would simply be to confuse a difference in our way of representing objects (which in themselves remain unknown) with a difference of these objects in themselves. I myself as represented by inner sense in time, and objects in space outside of me, are indeed specifically different *phenomena,* but this does not enable me to think of them as different *things*. The transcendental object which lies at the basis of external phenomena, like that which lies at the basis of internal perception, is neither matter nor a thinking being in itself, but a, to us unknown, ground of the phenomena which enable us to attain our empirical perception of each of these kinds of object." [1]

Kant supposes this view to remove the difficulty as to the connexion of mind and body.

These considerations are then applied by Kant to remove the difficulty which, on the ordinary theory, was felt as to the connexion of mind and body. The whole difficulty, he thinks, lay in the hypostasis of external phenomena, which were supposed to be things existing outside of our consciousness with the same quality which they have in our consciousness. For, when the relation was thus conceived, the question how the things produced the ideas corresponding to them, was beset with difficulty. "To an external object none but external effects, *i.e.*, changes of place, could be attributed; nor could it possess any powers except powers to determine spatial relations. But, in us, all effects produced are thoughts; and to these no relation of place, no change of place, and no spatial form can be assigned. Hence, we completely lose the guiding thread which, in external perception, is supplied by the survival of causes in their effects, when we try to follow external

[1] A. 379.

objects in their effects upon inner sense. We should, however, reflect that bodies are not things in themselves which are immediately present to us, but phenomena of an unknown object; and that motion is not the effect of this unknown cause, but merely the phenomenal appearance of its influence upon our sense. Body and motion, then, being neither of them things outside of us but only ideas within us, we do not need to suppose that the motion of matter produces ideas in us; but motion, with the matter which reveals itself in motion, is itself a mere idea; and the whole self-made difficulty reduces itself to the question how, and through what cause, the ideas of our sensibility are so connected together, that those which we call external perceptions can be represented according to empirical laws as objects without us." [1] When this is understood, it becomes unnecessary to resort to any such hypothesis as that of pre-established harmony or that of occasional causes, in order to get rid of the idea of a physical influence of matter upon mind; for, the difficulty of the latter hypothesis lay in the fact, that moving matter was taken for a thing in itself and not for a phenomenon. From the point of view we have now reached, we must give another shape to the problem, and ask how a thinking being can have external perceptions. In this shape, however, as Kant maintains, the problem is obviously insoluble; and our reference of each perception to a thing in itself as its cause is merely a way of marking the position of a *hiatus* in our knowledge. The question, indeed, is one which we are so far from being able to answer that we cannot even say whether, if the power of external perception were taken from us, we should, or should not, be able still to think these or other objects.

Hence the need for a *deus ex machina* to connect mind and body is removed.

Let us restate this argument of Kant a little more freely. On the ordinary view of the relation of mind and matter, we have to think of the motion of a body as producing sensation, if not perception, in the mind, just in the same way in which it produces motion in another body. But if we adopt such an idea, we necessarily make a leap from a cause to an effect which is not homogeneous with it; we completely "lose the guiding thread which is supplied

[1] A. 387.

by the survival of causes in their effects." There is no identity continuing itself in the change, but rather a complete μετάβασις εἰς ἄλλο γένος. This difficulty, however, which the Cartesians and Leibniz sought to evade by the theories of occasional causes and of pre-established harmony, disappears, as Kant here contends, whenever we realise that both effect and cause are phenomenal; though the former are phenomena presented under the forms of space and time, and the latter are phenomena presented only under the form of time. Putting it otherwise, when we consider that motion is essentially motion for a perceiving self, *i.e.*, is "an idea," and that the supposed effect, the sensation produced, is simply another event, which also is, only as it is for the perceiving self, *i.e.*, also is an idea, the difficulty of connecting these two kinds of "ideas" seems to disappear or to become less important. They both form links in one context of experience, though the one is represented as an event happening to a phenomenal substance determined in space, while the other is represented as happening to a phenomenal substance which has no determination as in space. Both have to be taken as mere phenomena or ideas, though it so happens that the objects in space "have the illusive characteristic that they appear, as it were, to detach themselves from the soul and hover outside of it." While therefore, we cannot understand "how external perception should be possible for us," we do not find any absolute chasm opening between it and internal perception such that only a *deus ex machina* can bridge it over.

But is it possible to thus equalise inner and outer experience?

This solution seems at first satisfactory; and no doubt it does remove the ordinary dualistic difficulty, which gave rise to the theories of "Occasional Causes" and "Pre-established Harmony"; for it shows that the external object, as well as the self as an object, is relative to the self as a subject, and that in that sense both are "ideas." But we soon find the difficulty returning upon us in another shape. For, according to this view, we are obliged to regard all phenomena as constituting one context of experience, in which all inner as well as all outer phenomena are combined according to the principles of the pure understanding. Now, in the first place, such a view,

as Kant indicates in the passage just quoted, would compel us to conceive the individual thinking subject as a substance among other substances, acted on by them and reacting upon them. But, even in the first edition of the *Critique*, reciprocity is treated by Kant himself, as a category which must be schematised not only in relation to time but also to space, and as therefore a category which can be applied only to things which are determined as existing in space. And in this very chapter in which he speaks of the "thinking ego as a phenomenal substance," we find Kant observing that Psychology and Physics differ greatly; in so far as in the latter science much truth can be developed *a priori* out of the mere conception of an extended impenetrable thing, while in the former out of the mere conception of a thinking being nothing can be so developed. "Now," Kant goes on, "the reason of this is that, though both are phenomena, the phenomenon of outer sense has something standing or permanent in it which furnishes a substratum underlying its changing determinations, and thereby puts into our hand a conception fruitful in synthesis, viz., that of space and a phenomenon in it; while time, the sole form of inner perception, has nothing permanent: and so under the form of time we can have presented to us only the change of determinations, but no object to characterise by their means. For, in that which we call the soul all is in continual flux, and nothing abides, except (if that could be brought into the question), the pure ego, which is quite simple,—in the sense that the idea of it has no content, no manifold, in it,—and which for that reason seems to represent a simple object. It would, however, be truer to say that it designates or marks off the ego from other objects, than that it represents it."[1] "For this ego is neither a perception nor a conception of any object: it is merely a form of consciousness, which is implied in all perception and conception, and enables us to turn them into knowledge—supposing always that something other than the mere ego is given in perception, as the matter for the conception of an object."[2] But, if this be true, then the category of substance cannot properly be applied

[1] A. 381. [2] A. 382.

to the object of inner experience as such, nor can inner experience form part of a connected whole or context of experience, including both inner and outer.

Inner experience cannot be co-ordinated with outward experience, for it is the same experience in a further reflexion.

The same conclusion may be reached in another way. Inner experience, as Kant describes it, differs in an important way from outer experience. The elements of inner experience proclaim themselves at once as "mere ideas," while the elements of outer experience appear at least to be something more. They have, as Kant says, the "illusive characteristic of seeming to separate themselves from the soul, and hover without it." But, Kant argues, the external object, like the idea of it, exists only for consciousness; and in this point of view they are both "merely ideas." Yet, there is a difference in the two cases. I may be conscious of an object, and then I may direct my attention to the determination of inner sense in virtue of which that object exists for me; and thus I may distinguish between the idea as a mere *status representativus* of the subject, and the object which I know through it. As Kant explains elsewhere, when I apprehend an object of experience and bring it under a conception, or even when I arbitrarily think an object, I determine my inner sense in a particular way in accordance with my thought. But, I can then proceed to observe this determination, and can say, "I have experienced what is necessary, say, in order to apprehend a figure of four sides in such a way as to enable me to demonstrate its properties. I thus get the empiric consciousness of the determination of my state in time by thought." [1] But this consciousness of the inner determination involved in the determination of the external object, cannot be taken as the consciousness of an object which is co-ordinate with the external object, or related to it as one phenomenon is to another according to the principles of the connexion of substances in one experience. It cannot be so taken, because the former consciousness is a consciousness of what was involved in the latter, a consciousness of the determination of the inner life of the subject, by which the consciousness of an object is realised. Properly speaking, it is only in this last reflexion that the distinction of inner and outer experi-

[1] R. X. I. 261; H. IV. 499.

ence emerges while, at the same time, they are seen to be correlates of each other. But it is impossible that the inner process, involved in the determination of the external object as such, can be treated as a phenomenon which is related according to the Analogies of Experience to the object which through it exists for us. The motion of my body by another body external to it, may, because my body is a sensitive organism, be a condition without which that other body would not for me become an object of perception. But the perception itself cannot be connected with the motion, as that motion is with the motions of other bodies. We have here a relation which we cannot explain without a *μετάβασις εἰς ἄλλο γένος*. Without retracting the abstraction by which we think of moving things apart from their relation to sensitive subjects, we cannot explain how the motion of an object and perception as a state of the subject should be connected. And with the retraction of this abstraction we have got into a world which cannot be explained by the Analogies of Experience, without the aid of categories of a higher order. In any case, if we think of a motion as producing a sensation, still more a thought, we have brought in a new factor, which cannot be co-ordinated with the phenomena with which we were previously dealing, as they are co-ordinated with each other. The inner experience to which attention has now been directed, is not another experience to be set beside outer experience, but one which includes it and goes beyond it. Inner experience is outer experience, and something more.

Kant's gradual discovery of this.

Now, it is obvious that between the periods of the first and second edition of the *Critique* this difficulty, or at least the conviction that inner experience cannot be simply co-ordinated with outer experience on the ground that both are "ideas," was brought home to Kant.[1]

[1] I express myself thus hesitatingly because Kant never completely realised the result of his changed point of view. He saw, as we shall find, that it is impossible to bring the soul, as the object of inner experience, under the same categories as the object of outer experience; he saw also that the former is not parallel with the latter, but presupposes it, and is presented to us by a new reflective movement which goes beyond the consciousness of it; but he still speaks of the phenomena of the inner life as part of the general mechanical nexus of nature, and indeed it is this that gives its paradoxical aspect to his

Already in the first edition he had, as has been shown, recognised the impossibility of directly bringing inner experience under the category of substance. Yet, in the *Prolegomena,* in a passage already quoted, he still speaks of the connexion of external phenomena according to empirical laws as "proving their objective truth, just as the connexion of the phenomena of inner sense proves the reality of my soul";[1] and he maintains that we have to "investigate the connexion of phenomena in inner sense according to universal laws of experience." But various causes were already forcing him to realise more definitely what he meant by the distinction of inner and outer experience, as well as by the distinction of the objects of both from those things in themselves, or that thing in itself, to which both were to be ultimately referred.

Kant's view as to the imperfectly scientific character of Psychology.

In the first place, as we have seen, he had already observed that inner experience cannot be properly brought under the category of substance, nor consequently under any of the Analogies of Experience which presuppose substance. And in writing his *Metaphysical Rudiments of Physics,* which was published before the second edition of the *Critique,* he was led by this and some other considerations, which will presently be mentioned, to renounce his first intention of applying his general theory of experience to Psychology as well as to Physics. For, he argues, in order to an *a priori* knowledge of definite objects in nature, it is necessary that "we should be able to bring the conceptions of the pure understanding into relation with a corresponding *a priori* perception, *i.e.*, to *construct* the object of the conceptions or set it before us in an image of perception. Now, all rational knowledge by means of the construction of conceptions is mathematical. While, therefore, a pure philosophy of nature, *i.e.*, a philosophy which investigates the constitutive elements of the general conception of nature, may be possible without mathematics, it is only by means of mathematics that we can reach a pure doctrine as to the action of definite things

view of man's life as at once phenomenally subjected to natural necessity and noumenally freed from it.

[1] *Prolegomena,* § 49; R. III. 106; H. IV. 85.

of sense, whether material or spiritual."[1] Now "Mathematics is not applicable to the phenomena of inner sense and their laws. At least the only law which we can speak of in this connexion is the law of continuity, which is manifested in the process of inner change. By the application of Mathematics to this law, however, we should get an extension of our knowledge of the soul, which would be related to the extended knowledge of body that Mathematics contributes to Physics, very much as the doctrine of the properties of a straight line is related to the whole of Geometry. For the pure inner perception, in which the phenomena of the soul would have to be constructed, is time, which has only one dimension. Furthermore, even if we regard Psychology merely as a systematic art of analysis or an experimental doctrine, it cannot rise to the level of Chemistry; for the manifold of inner observation cannot be resolved into its elements, except by a merely ideal division. We cannot keep the parts separate and again unite them at pleasure. Still less can we subject another thinking subject to our experiments in a way that could produce any satisfactory result. Finally, our observation itself alters the state of the observed object and leads us to misinterpret it. Hence, Psychology cannot become more than a historic, and so far as may be, a systematic, doctrine of the nature of inner sense, *i.e.*, it can only be a description of the soul as a natural object, and not strictly a natural science of the soul or even an experimental doctrine in regard to it."[2] To this we have to add, what Kant says in another (already quoted) passage of the same work, that the phenomena of the inner life have no parts outside of each other, and therefore no parts which are substances like things in space. Hence, it is possible to conceive that by a gradual diminution of intensity our consciousness should be reduced to extinction without any annihilation of substance.

In this way Kant strips the inner phenomena, which he still regards as objects of experience, of the determinations by which outer objects of experience are characterised; and makes it impossible to treat the object of inner sense

[1] *Metaph. Anfangsgründe Vorrede;* R. V. 309; H. IV. 360.
[2] V. 310.

as taking its place on equal terms among the objects of experience.

Kant's twofold answer to those who treated him as a Berkeleian.

But there is another point of even more importance in relation to the evolution of Kant's thought. In the interval between the two editions of the *Critique*, Kant was greatly influenced by the way in which the first edition was interpreted. Kant's reviewer in the *Gelehrte Anzeiger* of Göttingen made it his great charge against the *Critique* that by it outer sense was brought down to the level of inner sense, *i.e.*, that both were represented as having to do with mere " ideas of our minds "; while he neglected to notice how the empirical reality of the objects of experience is connected with the universality of the principles of the pure understanding. He observed, so to speak, Kant's levelling down, but not his levelling up of experience. On the other hand, he treated Kant's Transcendental Idealism as fatal to the distinction between phenomena and things in themselves. But Kant " never thought of questioning " that distinction; nay rather—we may even say—it was one of his main objects to establish it, in order that he might be able to limit the application of the categories of necessary relation to objects of sense or phenomena.

(1) That the *a priori* view of the categories and forms of sense vindicates the objective reality of our experience in an empirical sense.

In his notice of this criticism at the end of the *Prolegomena*, Kant deals with the former of these points. " The principle of all true Idealists, from the Eleatic school to Bishop Berkeley," may, he declares, be gathered up in the formula that " all ideas of things that come to us through sense and experience are illusory, and that truth is to be found only in the ideas of pure understanding or the pure reason. But, the principle which throughout rules and determines my Idealism is, that all conceptions of things derived from pure understanding or pure reason are entirely illusory, and that truth lies only in experience." [1] And then he goes on to declare that, while he agrees with the Idealists in holding that " time and space and whatever exists in either must be regarded not as things in themselves or their properties, but only as belonging to the phenomena of these things," he differs from them, and especially from Berkeley, in holding that, inasmuch as time and space are pure forms of our sensibility, " they

[1] R. III. 154; H. IV. 122.

with all their determinations can be known by us *a priori*." Now, there can be no criterion of truth unless particular experiences rest upon universal and necessary laws. The effect, therefore, of Berkeley's view of the empirical nature of our perceptions of space (and time) is, that phenomena are reduced to merely illusory appearances. On the contrary, Kant contends that on his own doctrine time and space, in combination with the pure conceptions of the understanding, prescribe laws *a priori*, to all possible experience, and thus enable us to distinguish reality from illusion.

How far is Kant just to Berkeley?

On this we may remark that it is only in view of his last work, the *Siris*, that Berkeley can be reckoned, along with Plato and the other Idealists, as a supporter of the doctrine that real things are apprehended by pure reason, while phenomena only are known through sense and experience. In Berkeley's earlier works phenomena, or, as he calls them, ideas, appear as the objects of consciousness, the only real objects which there are or can be. It is true that Berkeley goes on to distinguish " notions " from " ideas," and to refer the latter in so far as they are involuntary to God as their author or cause. It is true also that he treats these involuntary ideas as a language by which God speaks to us. In such conceptions we may find the link that connects the Sensationalism of his earlier, with the Idealism (in the proper sense of the word) of his later, works. On the other hand, Kant, from his point of view, has fair ground for arguing that, because Berkeley has not admitted the *a priori* character of time and space, and of the principles of pure understanding as determining phenomena according to these forms; because, in short, he has not seen that particular facts *as known* presuppose universal principles, he has left himself no criteria to distinguish reality from illusion. It is obvious that, if particular perceptions are not referred to anything beyond themselves, they cannot be regarded as revealing to us any objective reality. So far, then, Kant's point as against his assailant is simply to show that that assailant had not entered into his view of experience, or appreciated his distinction between perceptions or sensations as mere states of the sensitive subject, and these same perceptions or sensations

as referred to objects by means of the general principles of connexion under which they are brought in experience.

Transcendent ideality of time and space is necessary to their empirical reality.

Kant speaks to the same effect in the third Remark appended to the first part of the *Prolegomena,* where he argues that, though time and space are taken over to the subjective side, this does not involve the reduction of phenomena to delusive appearances. A doubt on this point might naturally suggest itself to one who came from Leibniz to Kant. For, while to the former perception was only confused conception, Kant maintained that the distinction of conception and perception was not logical, but 'lay in the genetic origin' of each, and that the special character of the latter was due to the manner in which objects affected our sensibility. But does not this turn perception into subjective illusion? Kant answers, no; for illusion lies not in phenomena, as such, but in the way in which the understanding interprets them in relation to objects. And "illusion or truth will arise according as we are careful or careless in connecting the perceptions of sense in time and space according to the rules of the connexion of all knowledge." Thus, "though I hold all ideas of sense together with their forms to be merely phenomena, and time and space to be merely forms of sensibility, which cannot be found outside of sensibility in any objects; and though, therefore, I cannot make use of these ideas except in reference to possible experience; yet in this there is nothing which should make me hold them to be merely illusory appearances; for it is not inconsistent with their being duly connected together in experience according to the rules of truth."[1] The doctrine of the ideality of time and space, indeed, "is so far from reducing the whole world of sense to an illusion, that it alone explains how the whole science of mathematics should be *a priori,*" and yet should contain not mere brain-spun fancies but objective truth. At the same time, it is the sole means of avoiding the transcendental illusion, which is at the bottom of the Antinomy of reason and which arises directly from the reference of the characteristics of the phenomena of experience to things in themselves.

[1] R. III. 48; H. IV. 39.

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assumed in Kant's mind a new form which made it require a new answer.

Germ of another view in the first edition.

It was Kant's original intention in that treatise to deal not only with Physics but also with Psychology; but, as we have seen, he gave up that idea mainly because in his view inner experience is subjected only to the form of time, and therefore, nothing can be said of the soul *a priori* except what can be deduced from the fact that its life is a continuous process. Further, either at this time or at least before the second edition of the *Critique* was published, Kant's attention seems to have been specially directed to the fact that inner and outer experience are not two independent spheres of knowledge. In the first edition, he had already remarked, that "all ideas, whether they have external things for their objects or not, belong as determinations of mind to our inner state, which inner state necessarily falls under the formal condition of inner perception, viz., time"; and that, therefore, "time is the condition of all phenomena whatever, the immediate condition of the inner phenomena of our soul, and thereby the mediate condition also of external phenomena."[1] But this did not prevent him from speaking of the objects of inner and outer sense as if they were independent objects of experience standing on the same level. It is true that Kant does not directly apply the categories to determine the relation of inner and outer experience, but he at least speaks as if each might be determined as an empirical connexion by itself; and he nowhere speaks more distinctly of their relation to each other, than in the passage where he tells us that "external phenomena seem, as it were, to detach themselves from the soul and to hover without," but that this does not hinder them from being phenomena or ideas, like other ideas, which do not so detach themselves.

View of the second edition that inner experience presupposes outer experience.

In the second edition, on the other hand, Kant seems to see that inner and outer experience are not two spheres of knowledge, separated from each other only as relating to two distinct objects which belong to the same context of experience. Inner and outer experience, as he now points out, are identical in matter; and the determination of what we proleptically call the outer object is presup-

[1] *Kritik*, A. 34; B. 42.

posed in the consciousness of the process *a parte nostra* by which this determination is effected. We have, he declares, "from things without us the whole material of our knowledge even for our inner sense."[1] "It is," he says again, "the ideas of outer sense that constitute the proper matter with which we occupy our minds."[2] Now, space was said to be "the form of our receptivity in so far as we are affected by objects and through such affection come to represent them in perception"; while time in like manner was regarded as "the form of our receptivity in so far as we are affected by ourselves and thereby come to represent ourselves in perception." We are not, however, to suppose that these are two separate processes. The true state of the case is exhibited in a passage of the Deduction of the second edition, where it is said that, on the one hand, the affection of our own passive sensibility by the understanding, which is what Kant calls the "transcendental synthesis of imagination," is necessary ere we can determine any external object as such; and that, on the other hand, the consciousness of the successive process by which this determination is effected, is what makes us an object for ourselves in inner perception. Kant, indeed, speaks of inner sense being affected in this process, but here he must be regarded as using the term "inner" proleptically; for if by inner sense we mean the consciousness of the self as a subject which passes through these successive states, it is obvious that such a consciousness is the result of reflexion upon the process by which the object is determined.

"We cannot think a line," says Kant, "without in thought drawing it; we cannot think a circle without in thought describing it; we cannot represent the three dimensions of space without setting before our mind's eye three lines which meet at right angles with each other in the same point; we cannot even think of time itself without drawing a straight line as the outward image of time, and directing our attention to the act of synthesis of the manifold whereby we successively determine inner sense, and so to the succession in this determination." We must, therefore, have "motion as an act of the subject," *i.e.*, as

[1] B. *Preface*, XXXIX. [2] B. 67-8.

"a pure act of successive synthesis by productive imagination of the manifold of external perception," motion "as a synthesis of the manifold in space, ere we can reach the conception of succession, which we do by abstracting from the space-determination thus effected, and attending only to the act whereby we determine inner sense according to its form."[1]

Kant's final analysis of experience.

Kant, then, represented the matter as follows:—We have first an affection of sense (which is independent of all activity on our part, and which, for that reason, we refer to the thing in itself). To that affection, as the condition under which it can alone become a perception, or be referred to an object, there attaches itself the form of space. But this reference cannot actually be made unless there be a determination of inner sense, by which the matter so given is successively taken up and combined in the conception of an object. In this process there is a synthesis at once of the matter of sense and of space *quanta*, which gives rise to a spatial image. In thus determining the object further, we combine one element after another under conditions of time; but the consciousness of this successive synthesis, and consequently of time itself, and of the inner life as conditioned by time, is posterior to the consciousness of the object in space and presupposes that consciousness. We become conscious of the affection of ourselves by which we produce the consciousness of the object, only when we direct attention to the process by which that consciousness was produced, and abstract for the moment from the object in space which rises before us in perception by means of the process. Our experience of ourselves is thus the subjective counterpart of our experience of external objects, and not another experience separate from it. On the other hand, we have to remember that it is only as this subjective counterpart comes into view that objects become external, in the sense of being distinguished from the conscious life of the subject to whom they are successively presented; for "outer" can be thought of only in distinction from "inner."

How this is to be brought in relation to Kant's view of the principles of pure understanding,

The full meaning of this view of Kant, however, cannot

[1] B. 155.

be seen, unless we combine it with his ideas as to the necessary determination of objects by the categories. It is Kant's doctrine that no object can be known as such except in so far as the perceptions, which change upon us every moment, are referred to a permanent reality, of which they are regarded as representing the accidents or states. For, if objects were regarded as changing with the perceptions, this would be equivalent to a denial that objects exist at all. To say that an object exists and that it is permanent, amounts from the transcendental point of view to the same thing; for, to know it as existing I must take it out of its mere momentary presence in feeling to me as a sensitive subject, and refer it to "consciousness in general," *i.e.*, to a consciousness for which the particular exists only through the universal or as a determination of the universal. The way in which Kant expressed this, as was shown in detail in the last chapter, was to say that the consciousness of the changing is the consciousness of a relation in time; that this again can be reached only by a determination of the one time of which all special times are particular limitations; that, further, as time is merely a form of sense which cannot be perceived by itself, there must be something in that which is apprehended as in time to correspond with and represent the unity of time, as distinct from that which represents and corresponds to the succession of times. Or, to put it otherwise, time in itself neither flows nor is permanent; but we are conscious of its unity as we are conscious of the permanence of objects in it, while we are conscious of its flux as we are conscious of the change of their states or determinations. Kant then proceeds to show that the reference to a permanent object of any determination as a new state or property coming into existence in it, involves its reference to a previous state or determination of it or of other substances as its universal condition; and, finally, that the recognition of the coexistence of objects can only be a recognition of the states of these objects as reciprocally determining each other or finding their universal condition in each other.

to which outer and inner experience are at first supposed to be equally related.

Now, so far we seem to be dealing indifferently with the objects of inner and outer experience. At least, it is

only in dealing with coexistence that Kant found it necessary in the first edition to take notice of space as a form of the relations of the objects, or of some of the objects, of which he is speaking—a form which, like time, cannot of itself determine their relations, because it is not perceived by itself; but which nevertheless is a necessary condition under which their relations are determined by the categories.

The proof of these principles requires that they be viewed first as principles of the possibility of external experience.

But the "general remark on the system of principles of the pure understanding," which is added in the second edition, carries us a step further. In that remark he begins by insisting, in terms similar to those used in the first edition, on the need of perceptions to exhibit the reality of the conceptions of the understanding, which in themselves are mere forms of pure thought or judgment. The proofs of the principles were, as he points out, only deductions of them as conditions of the possibility of experience and not derived from conceptions. Thus, we did not get our evidence for the principle of causality out of the mere conception of an event *in abstracto* as an object of thought, but we showed that it is necessary to the consciousness of it as an object of possible experience. In other words, we asked how an empiric perception could be the means of giving us such knowledge, and we found that it was possible only through its determination by the schematised category.

But Kant then goes on to add a thought which was not contained in the first edition of the *Critique*. "Yet more noteworthy is it that in order to understand the possibility of things in conformity with the categories and so to exhibit the *objective reality* of the latter, we need not merely perceptions but even, in all cases, external perceptions. When, *e.g.*, we take the pure conceptions of relation, we find that in order to supply something *permanent* in perception which corresponds to the conception of *substance*, and so to exhibit the objective reality of that conception, we require a phenomenon in *space*; because space alone is determined as permanent, while time, and so all that is in inner sense, is in constant flux. Again, in order to exhibit *change* as the perception corresponding to the conception of *causality*, we must take for our

example motion, as change in space; and without such an example, it would be as impossible for us to set change before our mind's eye in a perception, as it is to comprehend it in pure thought. For change is a combination of contradictory determinations in the existence of one and the same thing. Now, it is quite impossible for reason without an example, to make it comprehensible that from a given state of a thing an opposite state should follow. Nay, we may add that it is something to which, without a perception, we could attach no intelligible meaning. Now, the perception required is the perception of the movement of a point in space. It is the existence of such a point in different spaces (as a sequence of opposite determinations) which first enables us to intuitively realise a change; for, in order afterwards to make inner changes of state thinkable, we must first image time (the form of inner sense) as a line and the inner change as the drawing of the line—thus calling in the aid of external perception to make comprehensible the successive existence of ourselves in different states. And the reason of this is, that all change presupposes something permanent in our perception without which it could not be perceived as change, and that in inner sense no such permanent perception is to be found. Finally, the possibility of objects that conform to the category of *reciprocity* is equally incomprehensible to pure reason. Hence, we are unable to understand its objective reality without perception and indeed external perception. For, how are we to think it as possible that, if several substances exist, there should be something in the existence of each which follows necessarily from the existence of the others, so that from a determination of one, we can argue to necessary presence of connected determinations in the others? And this is what is required for reciprocity, however difficult it may be to understand such a relation between substances which, as such, have isolated independence. Hence, Leibniz, when he attributed a certain *commercium* to the substances of the world, had to bring in the Deity to mediate between them, seeing that from their existence taken by itself such a relation rightly seemed to him to be incomprehensible. We may, however, easily make such community of sub-

stances intelligible to ourselves, if we represent them as in space, *i.e.*, as objects of external perception. For space contains already in the *a priori* idea of it certain formal relations of externality, in which lies the possibility of real relations of external action and reaction between substances, and so of reciprocity. In like manner, it might easily be shown that the possibility of things as *quanta*, and so the objective reality of the category of quantity, can be exhibited only in external perception, and can only in the second instance be applied to inner sense also." [1]

The problem of knowledge must, therefore, in the first instance, be taken as the problem of the possibility of outward experience.

If we bring this statement into relation with what has been said before, we see how it is to be understood. The Principles of Understanding had to be proved indirectly, by reference to possible experience. Kant here adds that they can be proved, in the first instance at least, only in relation to possible external experience; *i.e.*, that we have first to ask, not simply how objects in general with their changes and coexistences are possible experiences, but how *outward* objects with *their* external changes or motions and their coexistence in one space are possible experiences. This is necessary, because time itself can be represented only by a line in space; and this again is a consequence of the fact that time is in constant flux, while space has its parts permanently determined in relation to each other. Hence, in space alone can we seek for that which corresponds to the category of substance; and determination by that category is the basis of all other determination of objects as in time. If, therefore, it be necessary that there should be something in objects, as Kant argues, to represent time itself as that in which all special times succeed each other, that something cannot be represented as existing merely in time; it must be also in space; for that which is determined as merely in time would be merely changing, or rather it would be mere vicissitude without permanence and so would not even be known as changing. Hence, an experience of things as merely in time would be impossible, or impossible at least as a primary experience.

The effect, then, of Kant's "remark" is to show a dependence of determination in time upon determination

[1] B. 291 *seq.*

in space, which necessitates a kind of double schematising of the categories in order to their application to experience. Inner experience or experience of our states as successive in us, in so far as it is an experience under the form of time alone, is dependent for its possibility on the possibility of outer experience; and therefore, immediately and in the first instance, our question must refer to the possibility of external experience only.

How far does this affect the deduction of the principles?

Does this in any way affect Kant's argument? The answer must be that, while it does not alter the general argument as to the necessity of the principles of understanding to determine for us objects of experience, it does involve a correction of his first statement of it, and especially of the idea of two separate kinds of experience, each of which has a different object. For, supposing that idea were correct, it would immediately follow that each of these objects must be conceived as connected with the other according to the Analogies of Experience. It now appears, however, that the consciousness of the internal object is the consciousness of the process in us as sensitive beings, by which the consciousness of the external object is realised. The former is, therefore not a new independent consciousness added to the consciousness of the object, but simply a correction of the latter in so far as it leaves out of account the process *a parte nostra* by which it is realised.

Purport of the Refutation of Idealism.

And this brings us to consider Kant's use of the principles thus established in his " Refutation of Idealism." The object of that Refutation, as he tells us, is once for all to give the *coup de grâce* to the theory which treated external experience as more doubtful than internal experience, and to prove conclusively that " we have experience and not imagination of external things." This proof, Kant thinks, cannot be given except by showing that " our inner experience, which Descartes did not question, is itself possible only under presupposition of outer experience." The dogmatic idealism of Berkeley was already, as Kant held, disproved by the *Aesthetic*; for Berkeley's disproof of the reality of external objects was really directed against an erroneous view of external experience, which asserted it to be an experience of things

in themselves. So conceived, space with all the objects it conditions could easily be shown to be unintelligible and contradictory; and therefore, "the good Berkeley" might be pardoned for denying their existence or treating them as illusions of imagination;[1] for, as Kant argues in another place, the moment we yield to the transcendental illusion, and treat time and space as absolutely real, we find ourselves face to face with the antinomies of reason which tempt us to treat them as altogether illusory. The *Aesthetic*, abandoning the idea that external things are things in themselves, is able to establish their reality as objects of experience, and to refute this crude form of Idealism. But this does not yet get rid of the problematic Idealism of Descartes, which asserts nothing but only argues that "it is impossible to prove by immediate experience any existence outside of our own." In the first edition, Kant thought it enough to say that all empirical reality is transcendentally ideal, and that, though in this sense ideal, the external is *as* real,—*i.e.*, it has the same kind of reality—as the internal, since its phenomena form a connected context of experience under the Analogies of Experience. But this still left room for a doubt, in so far as it admitted two kinds of experience, of which the inner included the outer: for why should it not be said that outer experience has no existence except as part of inner experience? Now, Kant attempts to meet this difficulty by showing that we cannot have inner experience except on the presupposition of outer experience; and that, therefore, it is vain to attempt to reduce the latter to a fiction, which is real only as an element of the former.

Ambiguity in its opposition of ideas to objects.

The proof which Kant gives has excited much discussion, and it is undoubtedly expressed with considerable ambiguity. This ambiguity is partly due to the necessity Kant is in of speaking of external objects as real in opposition to mere ideas, a mode of speaking which verbally at least brings him into collision with his own statement that all experience is of phenomena and so, in that sense, of ideas. He has, therefore, been supposed to be here asserting for phenomena a kind of reality which before he had allowed only to things in themselves; even although

[1] B. 71; Third general Remark to the *Aesthetic*.

he states explicitly, at the beginning of the *Refutation* itself, that he is seeking to prove merely that we experience external things and do not imagine them. Now, as we shall see afterwards, there is a certain sense in which we may say that, according to Kant, the reality of external phenomena involves a reference of them to things in themselves. But, immediately and in the first instance, what Kant is attempting to show is that inner experience is so dependent upon outer experience that the denial of the reality of the latter must carry with it the (to Descartes impossible) denial of the reality of the former. What Kant says, in fact, is that there is no determination of any object in time, which does not involve primarily the determination of the object itself as permanent. Now, inner experience has no permanent, because it is an experience of a flux of perceptions. The conscious self, indeed, underlies the flux of perceptions, as the unity in relation to which they are determined, or rather, as the unity which determines them as elements in an experience or objective consciousness; but with the consciousness of the self perceptions can be united only when they are determined as such elements. And, as this unity cannot furnish the manifold through the determination of which in accordance with the categories a consciousness of objects is generated, so it cannot itself be its own primary object; but that primary object must be something in distinction from which, and in relation to which, it becomes conscious of itself. It follows, therefore, that it is only in so far as we bind together a manifold as in space and determine it by the category of substance, that we can have knowledge of a permanent objective reality, in relation to which we can become conscious of the successive process of our inner life.

Argument of the *Refutation of Idealism*, and the defects in Kant's statement of it.

There is a certain difficulty about this argument, which arises from Kant's isolating the category of substance (as he does not isolate it in the passage previously quoted). The determination of the external object as a permanent substance, however, is for Kant the fundamental basis of all other determinations of it: it is that in which it is first distinctly taken out of the succession of our states and set over against them. Hence, according to Dr. Arnoldt,

what Kant really seeks to show is that, "while the transcendental unity of my original apperception progressively forms and rounds off one half of my complete consciousness, *i.e.*, all my perceptions of material things and processes in space, into an empirically real sphere of external experience, it also, along with this and by the same continuous process, shapes the other half of my complete consciousness, *i.e.*, all my perceptions of psychical objects and processes in time, into another empirically real sphere of internal experience."[1] This view I take to be in substance correct, in so far as it asserts that the consciousness of the external world and of our inner life unite to form one experience, "which could not be inward, if it were not at the same time, outward." But such words might easily be misunderstood, if it were supposed that the two forms of experience exactly corresponded to each other. That, of course, would not be consistent with Kant's own assertion that the category of substance cannot be applied to the phenomena of inner sense. In the first edition of this book, objection was taken to the *Refutation of Idealism,* on the ground that Kant's proof that the permanent substance is the necessary substratum of all time-determination, implied that only the changes of that very substance which is permanent can be objects of knowledge to us in experience. In the *Refutation,* however, Kant seems to argue that, while we cannot bring the thinking subject itself under the category of substance, the permanence of an *external* substance is sufficient to enable us to determine the sequence of states in ourselves as thinking subjects. And this objection will undoubtedly hold good, if we suppose that the self with the states and procession of its inner life is simply to be treated as an object like other objects. The result, however, to which Kant's argument really points is that in the determination of external objects in space, (the basis of all which determination is the application of the category of substance,) there is implied a process of the inner life; but that the consciousness of that process, which is involved in the distinction of inner and outer life, logically presupposes the process itself, and therefore the determination of objects

[1] E. Arnoldt, *Kant nach Kuno Fischer's neuer Darstellung*, p. 38.

in space as such. The inner life is thus in a sense parallel with the outward, but in another sense, it includes and goes beyond it, implying a further reflexion which is not present in the determination of the outward object as such. Hence, it is only what was to be expected if we find that the categories, which were sufficient to determine the external world of objects regarded simply in itself, fail to be adequate when we come to regard our consciousness of that world as constituting the contents of our inner life. Unfortunately, Kant, regarding the movement of reflexion as a movement of abstraction, does not see this. Hence this impossibility—the impossibility of bringing the inner life under the principles by which outward objects are determined—seems to him to reduce Psychology below the level of science, in the strict sense of the word; whereas it really is an indication that these principles are inadequate to any science that does not consider the phenomena of matter abstractly, apart from their relation to life and mind. But, to this point we shall return after we have first discussed another point that requires elucidation in the *Refutation of Idealism*.

In what sense the *Refutation* can be said to refer to external objects as things 'in themselves.'

I said above that there was a sense in which a reference to things in themselves as at the basis of external experience is involved in that *Refutation*. Thus, Kant says that " if with the intellectual consciousness of my existence expressed in the ' I am ' of pure apperception which accompanies all my judgments and acts of understanding, I could at once combine a determination of my own existence through *intellectual perception*, the consciousness of a relation to something without me would not be necessary for such determination." [1] Now, in this it is implied that the division of the consciousness of the self from that of the not-self, and the dependence of the former upon the latter, really result from the fact that affections need first to be given; and that it is only afterwards that the subject, taking them up successively and binding them together into one consciousness of a world in space, can, in opposition to the world so determined, become conscious of itself as a unity in all this process. While, therefore, it is not true that Kant supposes us to become conscious of our-

[1] B. *Preface*, XL.

selves in opposition to permanent things in themselves, and what he is speaking of is the relation of two empirical objects, or rather of two aspects of our experience;[1] yet it is true that ultimately the dualism in experience is in his mind connected with the opposition between the ego in itself and the thing in itself; for the latter is "the ground" to which the materials of experience are attributed, just in so far as these materials are passive affections, given to the mind in sense and not supplied by its own spontaneity. And the work of that spontaneity is simply to construct the materials given into an experience of external objects, in opposition, and in relation, to which it then becomes conscious of the process of self-determination involved in that construction.

How Kant proceeds from the determination of the external object as an idea or phenomenon to the determination of it as an object in distinction from our ideas.

In what sense can we recognise this view of Kant as a true conception of the relations of inner and outer experience? For the ordinary consciousness, the object stands in relation to the subject, but is quite independent of it; and the idea that it is so independent readily clothes itself in the metaphor of spatial externality. The object is thus

[1] The great difficulty in Kant seems to be that he does not distinguish these two views. His argument really points to "two aspects" of experience, regarded as a determination of objects and regarded as involving a subjective process. In this point of view, inner experience is simply outer experience under a reflexion that brings both sides into relation to each other. But Kant constantly speaks as if it were a distinction of two objects in one experience, though he qualifies this by pointing out that the object of inner experience cannot be determined in the same way as the objects of outer experience. The inadequacy, however, as I contend, belongs here not to the object of inner experience, but to the categories under which it is proposed to bring it. As inner experience is outer experience and something more, it requires higher categories to explain it. The suggestion of some of the above remarks is due to Dr. Staudinger's *Noumena*, but since writing them I have read a luminous article by Dr. Vaihinger on Kant's *Refutation of Idealism* in the *Strassburger Abhandlungen zur Philosophie* (1884), in which the most of the difficulties in relation to Kant's language are discussed with great acuteness. Dr. Vaihinger dwells especially on the fact that Kant in the first edition was discussing mainly the relation of all experience to the *transcendental* ego, and, therefore, generally spoke of all phenomena as *ideas*; while in the second edition he dwells more upon the opposition of ideas, as states of the empirical ego, to external objects, both of which are in a sense "ideas" as they are existences for the self. The confirmations of this view which Vaihinger derives from the imperfect treatise on which Kant was engaged in the last years of his life are very remarkable. He notices also that in that treatise Kant shows a tendency to approximate to Fichte, which confirms the view suggested above.

conceived to be outside of the subject, as one object in space is outside of another. On this the first criticism which was made by Kant from his "transcendental" point of view was that the object is *out of* the conscious subject only as being an object for it, which it distinguishes from itself; but that it cannot possibly be spatially external to it, since objects are spatially external to each other only *for* consciousness, and there is no meaning in speaking of their being spatially outside of consciousness or of consciousness as being spatially outside of them. Indeed, such a relation of externality between consciousness and objects, if it were conceivable at all, would make it impossible that the latter should be objects *for it*. But this suggests the further thought, that the consciousness of the self and of the not-self are correlative, *i.e.*, that it is only in relation to the object determined as the not-self that we are conscious of ourselves. We are conscious of ourselves only as we distinguish the object from ourselves and determine ourselves in distinction from, yet in relation to, it. Now, Kant's way of recognising this truth we have already seen. He conceives of the self as a unity, which yet cannot be conscious of itself except in relation to a manifold which it successively takes up into itself and combines in relation to itself, in this manner constituting an object which it distinguishes from itself and from the process of its own inner life. In this way, beginning with the dualism of the ego and its affections, to which *a parte nostra* the form of space is conceived to attach itself, he is led to suppose that, on the one hand, the ego acting through its categories successively combines the matter so given in relation to itself and so becomes conscious of an objective world in space, while again, in opposition to the world in space so determined, it by a further process becomes conscious of itself and its process in time.

The error of this view is due to Kant's confusion of the regressive method with a method of abstraction.

The error which underlies this view is one to which reference has frequently been made, and one the explanation of which carries us very deep into the mechanism of Kant's thoughts. It may be shortly restated thus:—Kant conceives that inner experience is something more abstract than outer experience, just as the pure consciousness of the self is something more abstract still, which is reached by

going back to the ultimate unity involved in all experience. The ego, acting upon inner sense and taking up the given manifold, is conceived as constructing outer experience, which again gives rise to a consciousness of inner experience, when we abstract from the result and attend only to the process whereby outer experience is formed; and this, finally, gives rise to a consciousness of the pure self, when we abstract even from this process and attend only to the unity which makes it possible. In truth, however, as was shown in a former chapter, we cannot go back on the process whereby intelligent experience was formed, in the way of tracing how thought, successively taking up the data of sense, determines them by the categories, and how in this way a merely sensitive consciousness is turned into an intelligible experience. If we attempt to do so, we inevitably become the victims of the dilemma that the data of sense so taken up must be conceived as, prior to the application of the category, either having or not having the qualification which the category brings to it; and to admit this dilemma is to make the process of experience either useless or impossible. We can escape such an alternative only if we remember that the development of consciousness and self-consciousness is one in which there is no possibility of setting one element or process as distinctly prior or posterior in time to another. For, it is only as separated from the self that the object can be related to the self, and only as related to the self that the object can be separated from it. What, on the one side, is a reference of a state of the self to an object, may be described on the other side, as a separation of the self from the object. Perception and conception thus come into being as at once separated from, and referred to, each other; or if we say that the former exists prior to the latter, it cannot, as so existing, be conceived as having the characteristics which it has when so distinguished and referred. Development involves not only an addition to, but a transformation of, that from which the development begins. We may say, if we like, that, if we had a series of sensations by themselves, these must be taken up and combined in relation to the unity of the self, ere they could give rise to the consciousness of an object; and we may say further that,

only as this is done, can we rise to a consciousness of the self as distinguished from the object. We must, however, remember that the latter process is not a new process which begins when the other is done; but that it is only for the self-conscious ego that the object is fully determined as an object, and that the construction of what is called outer experience is the construction of inner experience as well. Or, to put it otherwise, it is the full development of inner experience and the correction of the partial abstraction by which outer experience is, in its earlier imperfect forms, separated from it, that first show us what outer experience really is.

Ideas cannot be treated as states of the thinking subject, nor the inner life as a series of such states.

Kant thinks of the object of inner experience as the succession of our own ideas as states of our individual subjectivity. Properly speaking, however, ideas cannot be treated as states of an individual subjectivity, but only sensations: for ideas imply a reference to the "I think" on the one side, and to the object on the other. An idea always stands for something, is a symbol of something else than itself, to the ego that has the idea. But for that reason, it must be contemplated as other than a state of the subject for which it is. In becoming an idea, therefore, a state of the subject has ceased to be such a state; and, on the other side, the subject in turning a sensation, which may in a sense be called a state of the feeling subject,[1] into an idea, has ceased to be a merely feeling subject, and become a conscious self. Hence, though we may say that our sensations are the means whereby we know the world, we must recognise that, in so far as they remain sensations, there is no world for the ego to know and no ego to know it. It is a paralogism, therefore, when Kant ranks sensations as a kind of ideas, and treats sensations and ideas indiscriminately as states of the self. For the self is a subject of ideas, and so in the proper sense a self, only as it separates between itself and what are called its states and turns them into ideas through which it is conscious of objects. Now, if this be true, we cannot go back on any

[1] *I.e.*, it would be such a state if we could suppose that there is such a thing as a merely feeling subject (which is not implicitly a thinking subject), or that there is such a thing as a mere sensation (which is not implicitly a perception).

constructive process, in which an intelligible experience is manufactured by the understanding out of a series of sensational states. This, indeed, is involved directly in Kant's admission that the ego is conscious of itself only as it is conscious of the identity of its act in determining objects. It follows that the mere flux of sensations in us as sensitive subjects can in no way become objective for us as such a series. In that sense *inner experience,* if we can call it so, has already disappeared in the development of a thinking self. *Our* inner experience is just our outer experience on its inner side, or it is an experience in which that inner side is specially reflected on. And, on the other hand, we must remember that, though such distinct reflexion may be wanting, there is no outer experience which is not also an inner experience; or, in other words, that the determination of things as objects in time and space through the categories cannot be separated from a consciousness, though it may be an undeveloped consciousness, of their relation to the subject, which in distinction from them is conscious of itself. We can no more have an outer experience without an inner experience, than we can have a consciousness of the mere particular as such without the universal, though in both cases it is possible that we may have the former without reflecting upon the latter.

The mistake of Berkeley, and Kant's correction of it.

Now, in reflecting upon the inner life, as such, we are necessarily led to retract the abstraction under which the outer life is generally regarded, *i.e.*, to take into account the fact that outward objects exist only for a subject. But, in doing so, we are apt with Berkeley to fall into the opposite abstraction of a merely inner life which has no reference to an outer life. For, how did Berkeley reach his so-called Idealism? The effort of Locke to remove from external objects all that is merely subjective, had led to a view of those objects in which they are divested of all secondary qualities, and in which the objective world is reduced to a universe of mere matter and motion, a Newtonian system of mechanically related substances. Berkeley's criticism of this view is simply to point out that for a sensitive subject such a world can exist only through its own affections, and therefore cannot be known

to exist apart from them. The Kantian answer is that, while for such a subject there would be no external world as such, neither would there be any consciousness of sensations as states of the self. The life of a purely sensitive being is not for it an *inner* life, *i.e.*, not a consciousness of a series of states of its own being, any more than it is a consciousness of an outer world of objects. On the other hand, the self-conscious being which *has* an inner life, cannot separate it from the outer life which it presupposes. Its inner life is not the consciousness of a series of sensations as such, but of perceptions or ideas which refers to external objects. We are indeed entitled, with Berkeley, to correct the abstraction of the ordinary consciousness, by which external objects are taken as things in themselves which have no essential relation to the sensitive subject. And we are entitled with him to reject the distinction of the primary from the secondary qualities of things as objective from subjective; for feelings of touch are no more independent of sense than any other sensations. But then we are entitled equally to point out that, if we reduce the inner life to mere sensations, it ceases to be a consciousness of an inner any more than of an outer world; and, therefore, such a reduction cannot be said to *prove* that there is no outer world, but only an inner world. We cannot say that the inner series of sensations constitutes the fact, and that whoever goes beyond it to assert an outer world is going beyond that of which we have immediate consciousness; for we have not in this sense a consciousness of our inner life *except* as mediated by a consciousness of the outer world. And, if the process whereby a thinking consciousness goes beyond sensations in referring their content to external objects is to be treated as illegitimate, equally must we treat as illegitimate the process by which this sensitive content so transformed is referred to a self. To reduce experience to a purely inner experience, would, therefore, be suicidal, if it meant the reduction of the external object to a mere inward state of the subject: for, with this reduction, the subject itself would disappear, or, what is the same thing, would cease to be object to itself. Hence, the transcendental reflexion which calls attention to the relativity of the external object

to the subject, must not be interpreted as if it reduced that object to the feelings of a sensitive subject; for these do not constitute an inner any more than they constitute an outer experience, and they can be transformed into an inner experience only by a process which presupposes the determination of outward objects as such. What it really refutes is the Materialism which not only maintains the reality of the external object, but refuses to take into account the subject *for which* it is real. And what it tends to prove is not Sensationalism, but what we may call Spiritualism, or Idealism, in the proper sense—the doctrine that the reality of the material object lies ultimately in its necessity as an element in the evolution of spirit.[1] If, on the other hand, we say that the external object is relative to the feelings of the sensitive subject, it must be in the sense that the unity of the sensitive life, into which all the manifold *stimuli* from the external world are taken up and, so to speak, absorbed, contains in it the germ and anticipation of the unity of spiritual life, *i.e.*, of a life which implies the division and reunion of object and subject in consciousness and self-consciousness. In determining an animal as such, we recognise two sides of its being; we recognise it as an object in space, and yet as having in it a centre of sensation, in reference to which the spatial externality of the parts of its body is continuously in process of being cancelled. In its inner life, the externality of space is reduced to the unity of a process in time, and in the difference of its outward existence disappears in the unity of a sensitive subjectivity which passes through a series of states. In this sense it might be said to live merely an inner life, which, however, is inward only for us who contrast the two aspects of its life. And in our own life, in which the contrast of inner and outer is actually made, the inner life has *ceased* to be inward, in the sense of a series of sensitive states unrelated to objects, in the very process by which in another sense

[1] We may describe the error of Berkeley as essentially this, that he confuses the true Idealism, *i.e.*, the refutation of Materialism by the proof that matter as an object is relative to the conscious self, with the so-called Idealism which is really Sensationalism, and which is as inconsistent with the reality of spirit as of matter.

it has *become* inward, as the life of a conscious subject. Hence, we can refute the so-called Idealism, which denies the reality of the external world and reduces it to the sensations of the individual subject, by the very process by which we establish the true Idealism, viz., the doctrine that an external object is not seen in its whole truth until its relation to the self is considered, and until indeed it is regarded as an element in the process of spiritual life.

Inner experience=outer experience contemplated in its relation to feeling and thought.

The result then is to show the defect of three imperfect theories as to the nature of inner experience, all of which have left traces in the language of Kant. We cannot treat inner experience as the consciousness of another object which forms part of the same context of experience with external objects; nor, again, can we treat it as a separate kind of experience, which is capable of being brought under the same categories, though perhaps with a less definite result owing to the nature of the form of time; nor, finally, can we regard it as a consciousness of the process whereby sensations are developed into an intelligible consciousness. Kant, though he often speaks as if the first or the second of these alternatives were true, yet in his *Refutation of Idealism* seems to fall back upon the third. What he undoubtedly shows is, that inner experience cannot be brought into line with outer experience, or determined in the same way. But the reason lies, not, as Kant seems to imply, in the more abstract nature of inner experience (as given merely under the form of time) but in the fact that, with the recall of the abstraction which we use in determining the objects of outer experience as such,—in other words, with the introduction of the idea that such objects can exist only in relation to a perceiving subject,—we make a necessary *μετάβασις εἰς ἄλλο γένος*, a change to another sphere of thought, in which it is impossible to use the categories of external relation except in subordination to categories of a higher order. Even the action of the environment on a living being cannot be truly conceived according to such categories as those of causality and reciprocity, taken in their ordinary sense. Still less can we treat in that way the relation of the objects known to the self that knows them. In so far as the

objects with which we start are essentially objects related to feeling and knowledge, we cannot separate the determinations they have as objects in space from the further determination which comes to them from such relation. And this further determination, with the application of higher categories which it involves, is not an *external* addition to our knowledge of objects as in space, but a step toward the discovery of the ultimate meaning or reality of that knowledge. In this point of view, therefore, it is evident that to contemplate our experience as *inner* experience is simply to enrich our outer experience by bringing in the thought of its relation to feeling in ourselves as sensitive subjects. We cannot, however, conceive ourselves simply as sensitive subjects in relation to an environment, without still making abstraction from the fact that as sensitive subjects we are objects for ourselves, *i.e.*, that we are conscious of our sensations only as we distinguish them from and relate them to the unity manifested in self-consciousness. And this implies that our inner life is not seen in its truth when it is taken as merely sensitive. What, however, we usually mean by an inner experience, is the whole consciousness of ourselves as not only sensitive but thinking subjects; and this cannot be distinguished from our consciousness of the world; it can be so distinguished only in the sense that it is the consciousness of the world in a less abstract, and therefore in a higher and more complete form. In this sense the consciousness of the self is just the consciousness of the world fully developed.

Change of our view of the external world when we regard it as the environment of a developing organism.

Now, as has been indicated already, the conception of development has this difficulty about it that it contains something very like a contradiction. It is a conception applied to a being which exists in space and time, but only in so far as its existence is the negation of that externality which we attribute to all that is in space and time. Thus we think of that which develops as externally related to an environment, in which, however, it finds the means of its self-maintenance. The external relation prepares us to expect the loss of both terms in a third or resultant term; but the developing being subordinates the external

environment to itself, and makes the conditions that seem to limit it a means to the maintenance and aggrandisement of its own being. We may say, then, of such a being that it implies, to start with, an external or negative relation to that which yet it requires, and in which alone it can find itself realised. In the same way, we might show that a developing being exhibits to us a process of life, which seems at first to be a process of mere change, but which shows itself on consideration to be a change bent back upon itself. Thus we are forced to recognise that it is impossible to deal with a developing being, *either* as externally conditioning and conditioned by other things, *or* again as passing through a series of changes according to the law of causation, without bringing in, in the one case, the negation of the mere externality or spatial relation of the organism and the medium, and, in the other case, the negation of the merely causal sequence of its states.

Further change when we view it as an objective world which exists for a conscious self and *is* the means through which its self-consciousness is developed.

A further complexity arises when the being to which we apply the idea of development is a self-conscious being. For, in such a case, the nature of the being to be developed seems still more directly to involve the negation of that difference which yet seems to be presupposed. The consciousness of self is the consciousness of a unity which is presupposed in the determination of objects as a world in space and time. We cannot, however, suppose a difference, such as exists between things as in space and time, to exist in that for which alone time and space are. Yet, on the other hand, in so far as we admit that such a consciousness is gradually developed, we are obliged to regard the subject of it as passing through states in time and standing in relation to objects which externally affect it. Our first solution of the difficulty will naturally be to say that the developing being presupposes the externality which yet it negates, and that it presupposes the successive determination of the subject which yet is a conscious subject only as it cancels succession in itself. But the difficulty returns that, in taking this view, we seem to be making the subject of the consciousness, for which time and space alone are, itself an object in time and space, while yet we regard the process of its existence as one in

which both time and space are negated. To put it more directly, a developing consciousness is conceived as passing through a series of stages, yet, just so far as its development is *for itself*,—and it cannot be *its* development, strictly speaking, till it is for itself,—it neutralises this change. For to the subject as thus self-conscious, all its life is one. In the same way, its existence in space as externally related to other objects is *its* existence, only in so far as these objects and its own existence are equally *for it;* and this involves that, as a self-conscious being, it does not hold an external relation to them. We can get over this difficulty only by recognising that, while space and time and all objects in them exist only for a self-conscious subject, and while, in so far as I am a conscious self, they exist for me, yet that I am a derived self-consciousness, and so far must be regarded as an object, and not as a subject; though it is only as a subject that I am in the proper sense an ego or self,—a being which can say "I."

Kant's view of self-consciousness,

If this idea of the process of knowledge as a process of development were worked out, it would afford a solution of most of the difficulties which necessarily spring up in connexion with Kant's view of it. For his opposition of an ego in itself and a thing in itself, which are *beyond* experience, but to which the constituent elements of experience are referred, is made necessary by the supposed dualism *in* experience between self-consciousness and the consciousness of objects. And this dualism rests on the idea, that the return upon self in self-consciousness is a process of abstraction which presupposes the consciousness of objects, but which is negatively related to that consciousness. Hence, the reference of that in the object which thought in its pure unity excludes, to a thing in itself, corresponds, on the other side, with the conception of the unity of self-consciousness as purely analytic. On the view stated above, however, the return upon self in self-consciousness is a positive movement by which the consciousness of objects is completed; and, indeed, to seek to know things as they are in themselves, is *just* to correct the abstraction of the consciousness of objects by raising it to the form of self-consciousness.

A few more words of explanation on this point may be useful.

and of its relation to the idea of the noumenon.

Attention has already been directed to the way in which Kant's conception of the analytic nature of the judgment of self-consciousness leads us to the conception of a *Noumenon*. This noumenon is identified with the thing in itself, (which at first appeared merely as the unknown cause to which we refer sensations), and gives a new meaning to it. The two characters which the thing in itself thus plays are, indeed, closely connected: for it is because the pure spontaneity of the ego expresses itself in the analytic judgment that it can become synthetic only in relation to given matter; and, on the other hand, it is just for the same reason that the utmost synthesis reached in experience cannot correspond to the pure unity of thought, and that thought is obliged to set up its own ideal in opposition to experience.

Necessity of a principle to combine analysis and synthesis, thought and knowledge, as absolutely defined by Kant.

To put this more definitely, the thing in itself appears at first simply as the ground to which we refer our sensational data, which are given as the material for the process of experience. Objection has often been taken to the application of the category of cause to the relation of sensation to the thing in itself, and Kant seems to have been aware of this objection.[1] What, however, fortifies him against it is just this, that the activity of thought is conceived by him as in itself analytic, or as synthetic only through its application to the matter of sense through its forms; which again carries with it the consequence that in this synthesis difference can be only externally combined; and this in turn involves the contingency of experience in relation to thought, and the contingency of the particular elements of experience in reference to each other. Lastly, in so far as the thinking ego becomes conscious of itself in this process, it becomes conscious of this double contingency as opposed to its own pure analytic self-assertion of its unity, in which differences disappear; and it is thus driven to set

[1] This objection was first taken by Jacobi (*Werke*, II. p. 303, *seq.*). Kant's answer is practically contained in the following passage. "We think of something of which in itself we have no conception, but which we think of as standing in a relation to all phenomena analogous to that in which they stand to each other." (A. 674; B. 702.)

up an ideal of knowledge which contrasts with the reality of experience, in the same way that the pure consciousness of self contrasts with the empirical consciousness. In a former chapter, I pointed out more definitely the difficulties which arise from the analytic conception of thought in itself—which force Kant to schematise thought in relation to time, in order to reach the conceptions of intensive and extensive quantity, involving as these do the synthesis of unity and difference, of affirmation and negation. I pointed out, further, that the reflective categories, involving the idea of a duality of correlative elements, were illegitimately, on Kant's principles, ascribed to pure thought apart from its determination in relation to time, and could only be so ascribed because Kant starts from the judgment. In fact, Kant himself sees that apart from the schematism they fall back into the identity. Lastly, I pointed out that for the same reason, *i.e.*, because the difference is extraneously brought into thought, the return of thought into unity with itself becomes impossible. Hence, the categories of modality, which are meant to express the correlation of mind with its object, cannot be carried beyond the conception of relation already expressed in the reflective categories; *i.e.*, the mind must be conceived in relation to its object as in one aspect involving it, yet in another aspect repelling and excluding it. For, self-consciousness is possible only in relation to the object, as the consciousness of an identity of thought with itself in determining it as an object; yet, in such determination the object is opposed to the consciousness that so determines it. If we bring this into relation with what was said before of the synthetic judgment as a combination of the unity of thought with a matter extraneous to it, or of a matter already united with the unity of thought with a new matter, it becomes clear that for such combination there is wanted some middle term, and that this want of mediation always sends us back in search of a previous matter whose union with thought is more direct. But this previous matter in its turn, as matter given for thought and not by it, requires mediation. On the other hand, it is only, as Kant allows, in relation to a matter, that the identity of self appears as the *judgment* of self-identity or self-

consciousness. Hence, as an explicit self-consciousness, the ego involves the presence to it of that matter which it opposes to itself, and which it is ever by this regress seeking to bring to unity with itself. What this, however, would seem to involve, viz., that beyond the analytic and the synthetic judgments, as the condition of their possibility, or beyond the opposition of the subjective unity of thought and the objective unity of knowledge there lies a unity which embraces both, is hidden from Kant. Kant, therefore, is unable to find in the idea of self-consciousness more than the suggestion of an ideal of knowledge, which cannot be realised in experience as a knowledge of empirical objects. If, however, we consider the judgment of self-consciousness as what it really is, *i.e.*, as itself involving a synthesis which is also an analysis, as in fact transcending the distinction of analysis and synthesis which Kant draws, we shall have no difficulty in regarding the necessary distinction of the judgment of self-consciousness from the judgment of consciousness (*i.e.*, the judgment which expresses the knowledge of the object) as not excluding their unity, but rather presupposing it. And if this be the case, the ideal of knowledge suggested by self-consciousness will not be irreconcilable with the experience with which it is contrasted, but will rather be a necessary correction and completion of such experience.

We cannot stop short at the determination of the real as hypothetically necessary, *i.e.*, as an endless combination of externally determined phenomena;

This may be brought into relation with what has been already said of the principles of modality, and especially of the opposition of real possibility to reality. That opposition, as I pointed out, could not be taken in the sense that perception is something which must be added to thought in order to determine as real that which is already known as really possible. On the contrary, the reference of a perception to an object, which alone brings it under the category of reality, involves its connexion with other objects according to the analogies of experience. The defect of this determination, however, is that it can never be complete, and hence all the reality we can reach may be said to be only hypothetically necessary, *i.e.*, determined as real only in relation to something else which is not yet so determined.

but must go on to recognise in the self the principle in which the differentiation begins and to which it returns.

Now, the meaning of this is that, in terms of a conscious-

ness which is guided only by the reflective categories, there is no *final* determination of anything. Everything so determined appears as a link in a chain or network of conditioned conditions extending *ad infinitum* in time and space, as an endless series which nowhere finds a point of attachment to which it is made fast. But, then, the ego for which this chain exists and for which each perception is referred to another as a link in the chain, cannot itself be taken as such a link, nor can it be conceived as external to all the links as they are to each other. If this is so, the hypothetical necessity which we predicate of the links of the chain in relation to each other, cannot be the last word to be said even about these links. The relation to the self, which is implied in the consciousness of the world under such conditions, must be taken in to complete the conception of the world. This, however, implies that the chain exists only in relation to the self, which returns into itself—*i.e.*, is conscious of itself—only as it combines all phenomena presented to it in one world; or, in other words, that the chain itself is to be taken as a factor in the process whereby self-consciousness is realised. If we look at the chain by itself, we find that we are driven continually to seek a further link, while yet no last link can be found. But when we look at it in reference to the subject, we see that this endless progress is itself the result of the imperfection or abstractness of the principle, the application of which leads to it. The endless progress really is a factor in a life which is founded in itself and never removes from itself. In this point of view Kant's error is, that he stops short with the conception of self-consciousness as setting up an ideal for experience which it cannot realise, and does not go on to see that just in so far as self-consciousness is attained the ideal is realised; for that which, taken by itself, is a mere external combination of coexistent and successive phenomena which no-where and no-when limits itself, has become a unity of correlative elements in a whole which is limited by itself. No doubt there are new difficulties involved in the fact that this self-consciousness, as it appears in us, is only in process of development; but these difficulties do not affect the truth of the relativity of the chain of phenomena as such to the

self which brings their diversity together in the consciousness of its own unity.

The correction of our first view of objects under the mathematical principles by the analogies of experience.

From the point of view we have now reached, we can review the movement of Kant's thought in relation to experience, or rather we can see what that movement involves in a way impossible to Kant himself. The simplest attitude of thought toward objects—that in which there is least of reflexion upon the conditions under which they are known to us—is that in which they are determined as objects in space passing through changes in time, and in which they are supposed to be given in perception as such objects, so that for us is left only the task of analysis. On this view the mental process seems to be confined to a formal activity of thought, by which the quantity and quality of objects is exactly ascertained. But, as yet, we do not reflect on them except as objects given each in a single perception. A second reflexion, however, teaches us that without the determination of objects as permanent, and of their changes as determined by law, there would be no objects for us; or, in other words, there would be no things or events identified as the same on their recurrence in perception, and the world would not be for us one world in one space and time.

The correction of the view of phenomena under the analogies of experience by the higher categories which determine objects as related to the self.

When, however, such principles are seen to be necessary for knowledge, the question cannot but arise, whether we are entitled to apply them to perception: a question which can be satisfactorily answered only when it is shown that our perception really involves these principles, and that they spring from the same activity of the self by which objects were quantitatively and qualitatively determined, an activity which is not merely formal in the one case any more than in the other. But this again brings to light a new characteristic of things which gives still further qualification to them, viz., their essential relation to the self. And, if in taking the first step we were led to recognise that all objects in space and time must be necessarily related to each other according to the Analogies of Experience, we are now forced to go further and to recognise that time and space, the world of objects so related, cannot be adequately understood unless we regard it as essentially related to a conscious self, and as a necessary element in its self-

consciousness: or, in other words, unless we regard the world in space and time as essentially the manifestation of a spiritual principle.

It is the change which comes over the empirical consciousness in this point of view with which we have to deal in Kant's *Dialectic*.

END OF VOL. I.

GLASGOW: PRINTED AT THE UNIVERSITY PRESS BY ROBERT MACLEHOSE AND CO. LTD.

